



LANDSCAPE
ARCHITECTURE

ENGINEERING

PLANNING

230C W. Pennsylvania Ave.

Southern Pines, NC 28387

Voice 910-725-1107

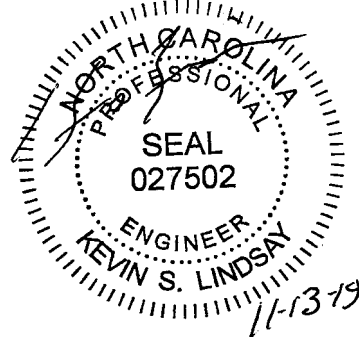
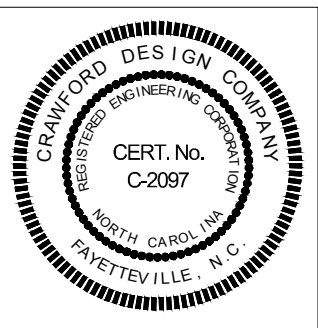
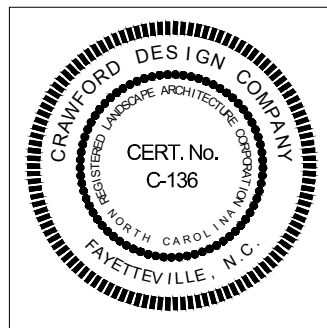
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Landscape Architecture ♦ Fayetteville Civil Engineering ♦ Southern Pines

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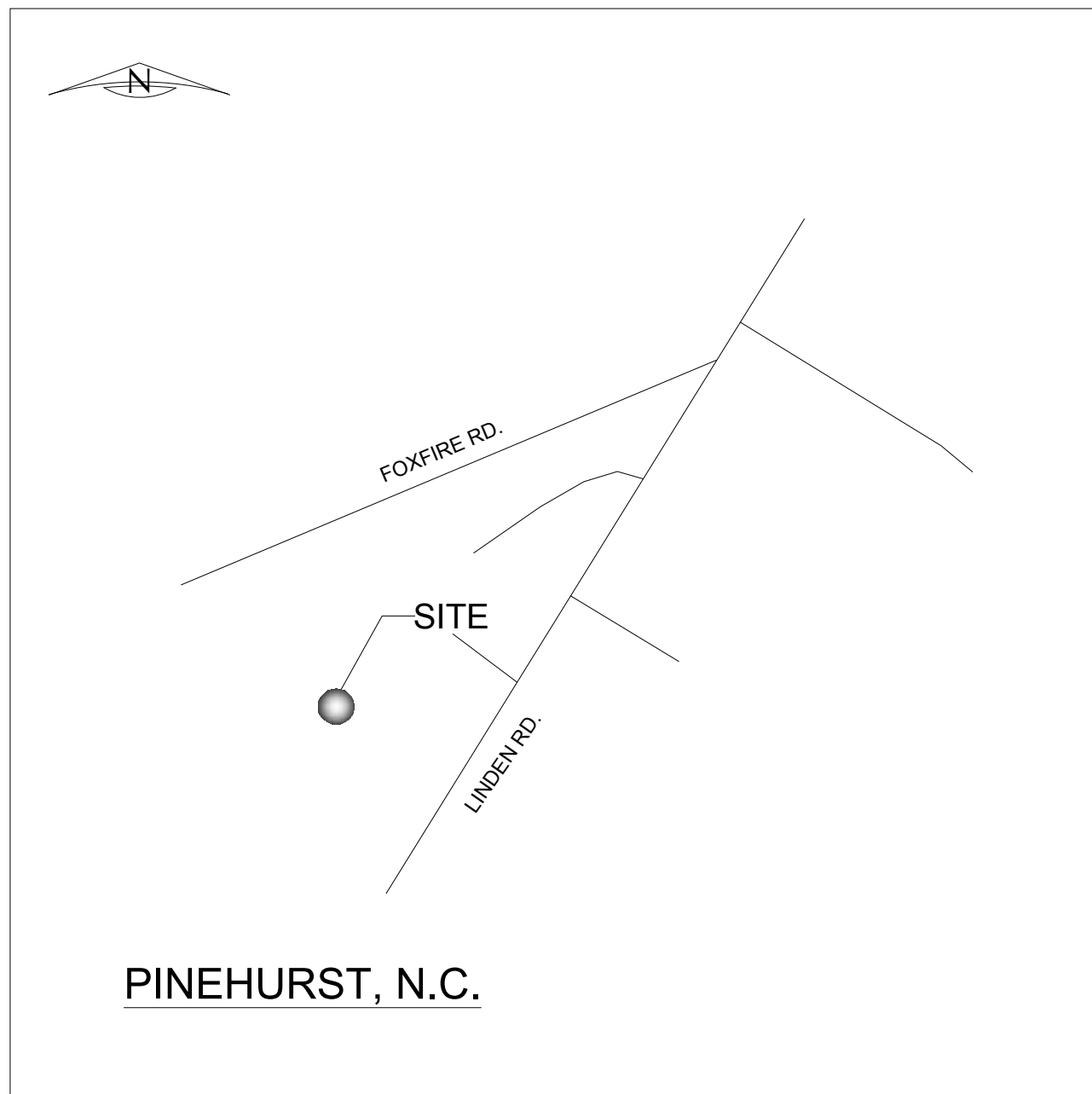
SEALS



PLAN SHEET INDEX

Sheet Title:	Sheet Number:
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GRADING, DRAINAGE AND EROSION CONTROL	C3.0-C3.5
UTILITY PLAN	C4.0
DETAILS	C5.0-5.3
LANDSCAPE PLAN	L1.0

VICINITY MAP (N.T.S.)



R & M COMMERCIAL REAL ESTATE, LLC

LaForet

MOORE COUNTY, NORTH CAROLINA

PROPERTY INFORMATION

Owner: R & M Commercial Real Estate, LLC
Property Address / Location: Linden Lane
Pinehurst, NC 28374

Owner / Client Contact: R & M COMMERCIAL REAL ESTATE, LLC.
335 FIELDS DRIVE, ABERDEEN NC 28315
Ph: 910-944-7453 Email: HOMEFORYOU TODAY@HOTMAIL.COM

PIN: 98000634 / 854200811190
Zoning: R-MF

GENERAL NOTES

ALL GENERAL NOTES, ABBREVIATIONS, SYMBOLS, AND OTHER INFORMATION INDICATED ON THIS SHEET SHALL APPLIED TO ALL CONTRACT DOCUMENTS AND SHEETS IN THIS SET.

- THE GENERAL CONTRACTOR SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS AT THE JOB SITE.
- ALL ELEVATIONS SHOWN MUST BE VERIFIED BY THE GENERAL CONTRACTOR WITH THE SURVEYOR OF RECORD PRIOR TO BEGINNING CONSTRUCTION. A TEMPORARY BENCHMARK OF THE FIRE HYDRANT ON NE SIDE OF THE PROJECT WITH AN ELEV=533.55 MAY BE USED.
- ALL DIMENSIONS AND ALL ELEVATIONS ARE BASED ON SURVEY PROVIDED BY OTHERS--SEE STANDARD DEVELOPMENT DATA BELOW THE INTENT OF THE LIMITS OF CONSTRUCTION (LOC) SHOWN ON THE DRAWINGS IS TO DEFINE THE GENERAL AREA TO CONSTRUCT, INSTALL AND/OR MODIFY THE SITE IMPROVEMENTS. TYPICALLY, THE LOC WILL FOLLOW RIGHT-OF-WAY OR PROPERTY BOUNDARIES. HOWEVER, THE LOC MAY BE SHOWN IN CERTAIN LOCATIONS FOR READABILITY AND CLARITY PURPOSES. THE CONTRACTOR SHALL CONTACT THE OWNER'S REPRESENTATIVE REGARDING ANY QUESTIONS AS TO THE EXACT LOCATION OF THE LOC PRIOR TO BID AND PRIOR TO BEGINNING CONSTRUCTION. ALL ITEMS SHOWN ON THESE PLANS THAT DO NOT SPECIFICALLY STATE "NOT-IN-CONTRACT (NIC)" SHALL BE INCLUDED IN THE BID COST. INCLUDING ITEMS THAT MAY BE OUTSIDE THE LOC BOUNDARY.
- LOCATIONS OF EXISTING UTILITY LINES HAVE BEEN TAKEN FROM UTILITY RECORDS SUPPLEMENTED BY FIELD INSPECTIONS AND SHOULD INDICATE IN GENERAL THE TYPE OF UNDERGROUND FACILITIES NOW IN SERVICE. LOCATIONS SHOWN ARE NOT GUARANTEED. DEVELOPERS OR CONTRACTORS SHALL NOT ONLY MAKE SUBSURFACE INVESTIGATIONS BUT SHALL ALSO ALLOW FOR CONTINGENCIES WHICH MIGHT ARISE BY REASON OF ENCOUNTERING UNRECORDED LINES OR LINES BEING IN DIFFERENT LOCATIONS THAN INDICATED ON THIS PLAN. AT LEAST 48-HOURS PRIOR TO ANY CONSTRUCTION ACTIVITY, EXCAVATION, GRADING, OR DIGGING ON THE SITE, THE GENERAL CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES TO VERIFY AND/OR FIELD-LOCATE THEIR RESPECTIVE UTILITIES (THE NORTH CAROLINA ONE CALL CENTER - 1-800-632-4949). ALL DAMAGE INCURRED TO EXISTING UTILITY LINES DURING CONSTRUCTION SHALL BE REPAIRED AT THE GENERAL CONTRACTOR'S EXPENSE.
- ALL WASTE MATERIAL SHALL BE LEGALLY DISPOSED OF OFF-SITE.
- A FORMAL EROSION AND SEDIMENTATION CONTROL PERMIT IS REQUIRED FOR THIS SITE UNDER THE REGULATIONS OF THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES (NCDENR). THE GENERAL CONTRACTOR IS REQUIRED TO AND SHALL FOLLOW ALL LOCAL, STATE AND FEDERAL REGULATIONS TO MINIMIZE EROSION AND THE TRANSPORT OF SEDIMENT OFF-SITE DURING CONSTRUCTION, INCLUDING THE PLACEMENT AND MAINTENANCE OF CONTROL MEASURES. ALL MEASURES REQUIRED SHALL BE INCLUDED IN THE BID COST WHETHER SPECIFICALLY INDICATED OR NOT.
- ALL CONSTRUCTION TO BE IN ACCORDANCE WITH ALL VILLAGE OF PINEHURST, MOORE COUNTY & STATE REQUIREMENTS.
- DISTURBED AREAS NOT COVERED BY ASPHALT OR OTHER IMPERMEABLE SURFACES SHALL BE SEEDED AND STABILIZED PER SPECIFICATIONS.
- ACCESSIBLE RAMPS, & SIGNAGE SHALL BE PROVIDED BY THE GENERAL CONTRACTOR AND INSTALLED PER FEDERAL, STATE, AND LOCAL REQUIREMENTS UNDER THE AMERICANS WITH DISABILITIES ACT (ADA).
- ALL TRAFFIC CONTROL DEVICES, PAVEMENT MARKINGS, SIGNS, AND SIGNALS SHALL BE DESIGNED, INSTALLED AND MAINTAINED IN CONFORMANCE WITH THE STANDARDS SET FORTH IN THE NORTH CAROLINA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
- THESE PLANS INDICATE THE MAJOR DEMOLITION COMPONENTS TO BE REMOVED AND/OR, RELOCATED. HOWEVER, THE CONTRACTOR SHALL DEMOLISH AND/OR RELOCATE ALL MISCELLANEOUS COMPONENTS NOT SPECIFICALLY INDICATED ON THESE PLANS TO PROVIDE A CLEAN SITE FOR THE INSTALLATION OF THE NEW IMPROVEMENTS.
- BOUNDARY SURVEY: BENNY BROWN, PROFESSIONAL SURVEYOR 5318 NC HWY 211, PO BOX 307, WEST END NC 27376 (910)-673-1446.
- CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING AND MAINTAINING TREE PROTECTION FENCING AROUND ALL "AT-RISK" TREES WITHIN THE VICINITY OF THE CONSTRUCTION ACTIVITY WHETHER SPECIFICALLY INDICATED ON THE PLANS OR NOT. TREE PROTECTION FENCING SHALL BE INSTALLED PRIOR TO BEGINNING ANY CONSTRUCTION OR OTHER DEVELOPMENT ACTIVITIES, AND SHALL BE MAINTAINED AT ALL TIMES THROUGHOUT THE DURATION OF THE PROJECT UNTIL FINAL SITE INSPECTION. REFER TO CONSTRUCTION PLAN DETAIL SHEETS FOR TREE PROTECTION DETAILS(S).
- THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH THE OWNER AND ENGINEER FOR APPROVAL TO REMOVE ALL CONSTRUCTED TEMPORARY & PERMANENT EROSION & SEDIMENTATION CONTROL MEASURES, AND FOR THE APPROVAL OF PERMANENT GROUND COVER.
- CONTRACTOR SHALL PROVIDE RED-LINE PRINTS OF ALL CHANGES AND MODIFICATIONS. THIS INFORMATION SHALL BE PROVIDED TO THE DESIGNER OF RECORD AT THE TIME OF SUBSTANTIAL COMPLETION.
- PROPERTY CAN BE FOUND IN DEED BOOK 2946, PAGE 292, MOORE COUNTY REGISTRY.

DEVELOPMENT DATA BLOCK

- PROPERTY IS OWNED BY R&M COMMERCIAL DEVELOPMENT, LLC.
- ZONE: R-MF LOCATED IN THE VILLAGE OF PINEHURST.
- AREA OF TRACT: 6.95 ACS
- PROPOSED BUILDINGS: 1,691 SF (HEATED) AND BE LESS THAN 35 FEET IN HEIGHT, AS PER VILLAGE OF PINEHURST REQUIREMENTS.
- PARKING SPACES: 2 PER UNIT, PLUS 1 PER 5 UNITS
TOTAL REQUIRED = 2 X 40 + (1/5) X 40 = 88 SPACES
ADA ACCESSIBLE SPACES REQUIRED: 1
ADA ACCESSIBLE SPACES PROVIDED: 1
TOTAL PROVIDED: 1 CAR GARAGES X40=40, +1 SPACES / DRIVEWAY X40=40, +5 AT MAIL KIOSK= 85 TOTAL SPACES PROVIDED + 5 BIKE SPACE (ALT. PARKING) = 90 TOTAL SPACES
SITE PLAN SHOWS 40 UNITS ON 6.95 ACS. (<8 UNITS PER ACRE ALLOWED)
- IMPERVIOUS SURFACES:
EXISTING: 126 SF TO BE REMOVED
PROPOSED: 45,532 SF PAVEMENT
2,485 SF OF SIDEWALK
708 SF OF MAIL KIOSK & SIDEWALK
40 TOWN HOMES X 1,066 SF / UNIT = 43,440 SF
95,165 SF=2.185 AC=31.4%
- PROJECT CONSISTS OF 1600 LF OF PRIVATE ROADS.
- NO CONDITIONAL ZONING OR SPECIAL USE PERMITS.

STANDARD DEVELOPMENT DATA

- SURVEY PROVIDED BY: BENNIE BROWN, 5218 NC HWY 211, PO BOX 307, WEST END NC, 27376 13031 FINAL PLAT SIGNED AND SEALED 5/16/19.
- WATER AND SANITARY SEWER LOCATIONS VERIFIED BY KEVIN LINDSAY, PE
PARCEL ID SHORT: 98000634
PIN: 854200811190
DB: 2946, PG: 292
- PROPERTY IS NOT IN 100-YEAR FLOOD PLAIN AS REFERENCED ON FEMA MAP 3710854200J DATED: 10-17-2006
- WATERSHED: PROPERTY IS IN LUMBER BASIN, STREAM: DROWNING CREEK, TYPE: WS-I-BW.
- ISO FIRE FLOW REQUIREMENT IS 500 GPM. (NOTE: BUILDINGS SHALL HAVE AUTOMATIC SPRINKLER SYSTEMS.
- EXCEPTIONS REQUESTED:
-NO SIDEWALKS--(APPROVED BY VOP)
-NO CURB AND GUTTER--(APPROVED BY VOP)
- THERE ARE NO RED-CKCADED WOODPECKER CAVITY TREES ON THIS PROPERTY AS PER SURVEY BY WETLAND SOLUTIONS.
- UTILITIES: EXISTING WATER AND SEWER VERIFIED BY KEVIN LINDSAY, PE AND DO NOT CONFLICT WITH PLANNED IMPROVEMENTS
- ALL EXISTING AND ANY NEW WATER AND SEWER LINES SHALL BE PLACED IN EASEMENTS, IF NOT ALREADY IN AN EASEMENTS. EASEMENT PLAT TO BE APPROVED BY MOORE COUNTY UTILITIES.
- NCDOT HAS INDICATED THAT THE PROPOSED NEW DRIVEWAY WILL NOT REQUIRE IMPROVEMENTS TO FOXFIRE ROAD. DRIVEWAY PERMIT #63-621371 ISSUED 9-12-2019

LEGEND / KEY

EXISTING	NEW	EXISTING	NEW
CABLE / TELEVISION CENTER LINE --- CA ---	--- CA ---	NOTE BUBBLE (GRADING)	N/A
CONTOUR LINE --- 100 ---	--- 100 ---	NOTE BUBBLE (SITE)	N/A
DIVERSION BERM EASEMENT --- DB ---	--- DB ---	NOTE BUBBLE (UTILITY)	N/A
FENCE --- X ---	--- FO ---	PLUG	→
FIBER OPTIC --- FO ---	--- FM ---		
FORCE MAIN --- FM ---	--- G ---		
NATURAL GAS --- G ---	--- OE ---		
LIMITS OF CONSTRUCTION --- OE ---			
OVER HEAD ELECTRIC PROPERTY LINE --- O ---			
PROPERTY LINE (ADJACENT) --- R/W ---			
RAIL ROAD TRACKS --- R/W ---			
RIGHT OF WAY --- S ---			
SANITARY SEWER --- SF ---			
SEDIMENT FENCE --- SR ---			
SLOPE DRAIN --- SD ---			
SLOPE RETURN LINE --- SR ---			
STORM DRAIN --- T ---			
SWALE (DITCH) LINE --- UE ---			
TELEPHONE --- W ---			
UNDERGROUND ELECTRIC --- W ---			
ASPHALT PAVEMENT (STANDARD)			
ASPHALT PAVEMENT (HEAVY DUTY)			
CONCRETE			
GRASS / SOG			
GRAVEL			
GRAVEL CONST. ENTRANCE			
PAVERS			
SEDIMENT TRAP			
SOIL			
VELOCITY DISSIPATION / RIP RAP PROTECTION			
WETLAND AREA			
ACCESSIBLE RAMP			
AREA LIGHT			
BACK FLOW PREVENTION ASSEMBLY			
BEND			
BLOCK & GRAVEL INLET PROTECTION			
CHECK DAM			
CLEAN OUT			
CURB & GUTTER			
CURB & GUTTER (SPILL OFF)			
CURB INLET			
DROP INLET			
DUMPSTER UNIT			
ELECTRICAL TRANSFORMER			
FIRE HYDRANT ASSEMBLY			
FLARED END SECTION			
GAS METER			
GAS VALVE			
GRADE BUBBLE (TOP-ELEVATION)			
GRADE BUBBLE (FINISH-GRADES)			
GUY WIRE			
HARDWARE CLOTH & GRAVEL			
HEAD WALL			
JUNCTION BOX			
LIFT STATION			
MAN HOLE			
NOTE BUBBLE (DEMOLITION)			
POST INDICATOR VALVE			
POWER / TELEPHONE POLE			
REDUCER / INCREASER			
RIDGE LINE			
ROCK PIPE INLET PROTECTION			
SIGNAGE			
TELEPHONE PEDESTAL			
TREE / SHRUB			
TRENCH DRAIN			
WATER METER / VAULT			
WATER VALVE			
WHEEL STOP			
YARD INLET			
PROJECT EROSION CONTROL MEASURES			
TEMPORARY SEDIMENT FENCE			
TEMPORARY GRAVEL CONSTRUCTION ENTRANCE			
TEMPORARY SKIMMER BASIN WITH POROUS BAFFLES			
TEMPORARY DIVERSION SWALE			
TEMPORARY SEDIMENT TRAP WITH POROUS BAFFLES			
TEMPORARY HARDWARE CLOTH & GRAVEL INLET PROTECTION			
VELOCITY DISSIPATION / RIP RAP PROTECTION			
ROCK PIPE INLET PROTECTION			

VILLAGE COUNCIL CONDITIONS OF APPROVAL

- LOCATION OF EXISTING UTILITIES BE VERIFIED AND THE SITE PLAN ADJUSTED AS NEED BE. UTILITIES LOCATED, NO CONFLICTS EXIST.
- THE PROPOSED TOWNHOMES BE EQUIPPED WITH A FIRE SUPPRESSION SPRINKLER SYSTEM AS PER REQUIREMENT OF THE FIRE MARSHALL. SPRINKLERS TO BE INSTALLED.
- ALL RUNOFF FROM NEW IMPERVIOUS SURFACE BE DIRECTED TO STORM MANAGEMENT AREAS. CONDITIONS MET SEE SHEET 3.0
- ALL PROPOSED ACCESS TO THE SITE OFF LAFORET LANE MUST BE AGREED UPON BY EXISTING HOA AND APPLICANT. COULD NOT CONTACT HOA. ACCESS REMOVED.
- APPLICANT MUST SUBMIT A REQUEST FOR A WATERSHED SPECIAL INTENSITY ALLOCATION OR A VARIANCE FROM THE WATERSHED REQUIREMENTS, IN ACCORDANCE WITH THE PROVISIONS OF THE PDO, WITH THE FIRST MAJOR SITE PLAN SUBMITTAL TO THE VILLAGE STAFF. SPECIAL INTENSITY ALLOCATION WAS APPROVED BY THE VILLAGE COUNCIL.

These improvements shall be constructed in accordance with the following drawings and with the Standard Specifications of the Village of Pinehurst.

I, Kevin S. Lindsay, PE, certify that the Standard Specifications of the Village of Pinehurst have been thoroughly checked and found to be applicable to this project. All exceptions to the applicable Village standards have been previously approved by the Village of Pinehurst and said exceptions are shown on Sheet(s) none of these drawings.

By: *Kevin S. Lindsay*
Date: 11-13-2019

INFRASTRUCTURE INSPECTION NOTICE TO CONTRACTOR

This is to advise you that the Village of Pinehurst is now requiring a **minimum** of Forty-eight (48) hours of notice when requesting an Engineering Inspection. Inspection requests may be made by calling the Public Services Department at 295-5021. **Items requiring an Engineering Inspection include, but are not limited to:**

- Subgrade inspection/proof rolling (streets, sidewalks, firelanes, etc.) Density tests from an approved geotechnical engineering firm may be required.
- Placement and inspection of base course materials including proof-rolling. Density tests from a Village-approved geotechnical engineering firm may be required/accepted by the Village.
- Placement and compaction of pavement materials including concrete and asphalt surface courses. Includes stringlines/grade control, paving & rolling operations, material inspections.
- Installation of water and sewer mains and services including pressure testing, pipe laying, chlorination of water mains, bacterial testing, mandrel pulls, etc. necessary to meet the Village's Utility ordinances. NOTE: The Contractor shall also contact Moore County Public Utilities Department Engineering Division at 947-6315 to schedule utility inspections as required by MCPUD.
- Installation of formwork and placement of concrete (sidewalks, curb & gutter, etc.) within the public right of way.
- Installation of storm drainage systems (pipes, trenches, catch basins, frames/grates, outlet protection, etc.)

Failure to schedule the required inspections shall be grounds for rejection of all work not inspected and issuance of a stop-work order until the project is in compliance

Village of Pinehurst Construction Plan Approval

All Construction Methods and Materials shall be in accordance with the Village of Pinehurst, Moore County Public Utilities, and NCDOT Standards and Specifications. In the event of a conflict between standards, the more stringent shall govern unless a written waiver is issued by the Village Engineer. Utility Installations and other Public Facilities, including streets, sidewalks, and handicap ramps, have been approved by the Village of Pinehurst and shall be so installed unless a change is authorized by prior written approval. Public Sanitary Sewer and Utility Easements shall be recorded prior to final acceptance and/or issuance of a Certificate of Occupancy by the Village.

Plan Approval Number _____
Engineering _____
Fire Department _____
Planning _____
Moore Co. Public Utilities _____

AUTHORIZATION TO CONSTRUCT IMPROVEMENTS

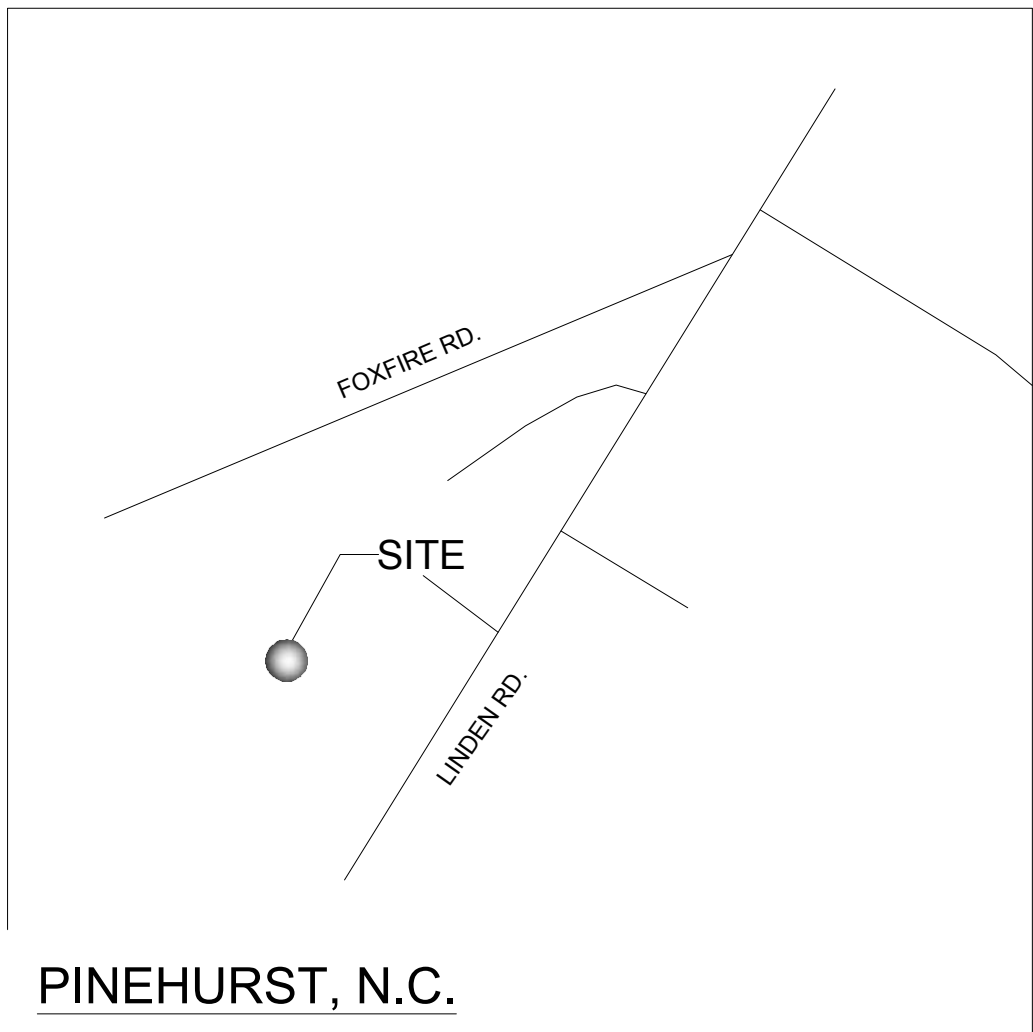
PART 1 - Record of Permits Issued by Other Regulatory Agencies

Water System Extension: Permit # N/A Issue Date: _____
Wastewater Collection System Extension: Permit # N/A Issue Date: _____
Land Disturbing Permit: Permit # MOORE-2020-014 Issue Date: 10/7/19

Issue Date:
11/13/2019

LaForet
MOORE COUNTY, NORTH CAROLINA

Project Number:
18033



PINEHURST, N.C.

VICINITY MAP (N.T.S.)

GENERAL NOTES

- 2" DENOTES TREE TO BE REMOVED
(289 total)

ADDITIONAL NOTES

- ALL GENERAL NOTES, ABBREVIATIONS, SYMBOLS, AND OTHER INFORMATION INDICATED ON COVER SHEET C0.0 SHALL APPLY TO THIS PLAN
- A TEMPORARY BENCHMARK OF THE FIRE HYDRANT ON NE SIDE OF PROJECT WITH AN ELEV=533.55 MAY BE USED. BENCHMARK TO BE SET PRIOR TO CONSTRUCTION
- PURSUANT TO G.S. 113A-57(3), THE ANGLE FOR GRADED SLOPES AND FILLS SHALL BE NO GREATER THAN THE ANGLE THAT CAN BE RETAINED BY VEGETATIVE COVER OR OTHER ADEQUATE EROSION CONTROL DEVICES OR STRUCTURES. IN ANY EVENT, SLOPES LEFT EXPOSED WILL, WITHIN 7 or 14 CALENDAR DAYS OF COMPLETION OF ANY PHASE OF GRADING, BE PLANTED OR OTHERWISE PROVIDED WITH TEMPORARY OR PERMANENT GROUND COVER, DEVICES OR STRUCTURES SUFFICIENT TO RESTRAIN EROSION. PURSUANT TO G.S. 113A-57(3), PROVISIONS FOR PERMANENT GROUND COVER SUFFICIENT TO RESTRAIN EROSION MUST BE ACCOMPLISHED FOR ALL DISTURBED AREAS WITHIN 15 WORKING DAYS OR 90 CALENDAR DAYS (WHICHEVER IS SHORTER) FOLLOWING COMPLETION OF CONSTRUCTION OR DEVELOPMENT. ALL SEEDED AREAS WILL BE FERTILIZED, RE-SEEDED AS NECESSARY, AND MULCHED ACCORDING TO SPECIFICATIONS IN THE VEGETATIVE PLAN TO MAINTAIN A VIGOROUS, DENSE VEGETATION COVER. IF ANY SEEDING FAILURE OCCURS, THOSE AREAS SHALL BE RE-SEEDED WITH RYE GRAIN FOR TEMPORARY STABILIZATION AND PREPARED FOR PERMANENT SEEDING
- SEE DETAIL SHEETS FOR EROSION CONTROL MEASURES & MAINTENANCE.
- CONTACT PERSON: RON JACKSON, R&M COMMERCIAL REAL ESTATE, LLC (910)-944-7435
- PARCEL IDENTIFICATION NUMBER(S): 98000634 / 854200811190
- CONTRACTOR SHALL REMOVE TEMPORARY EROSION CONTROL MEASURES ONLY AFTER REMOVAL HAS BE APPROVED BY DENR.
- CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING EROSION AND SEDIMENTATION CONTROL MONITORING ACCORDING TO NPDES PERMIT REQUIREMENTS.
- SEE SHEET C.5.2 FOR TEMPORARY & PERMANENT SEEDING REQUIREMENTS.

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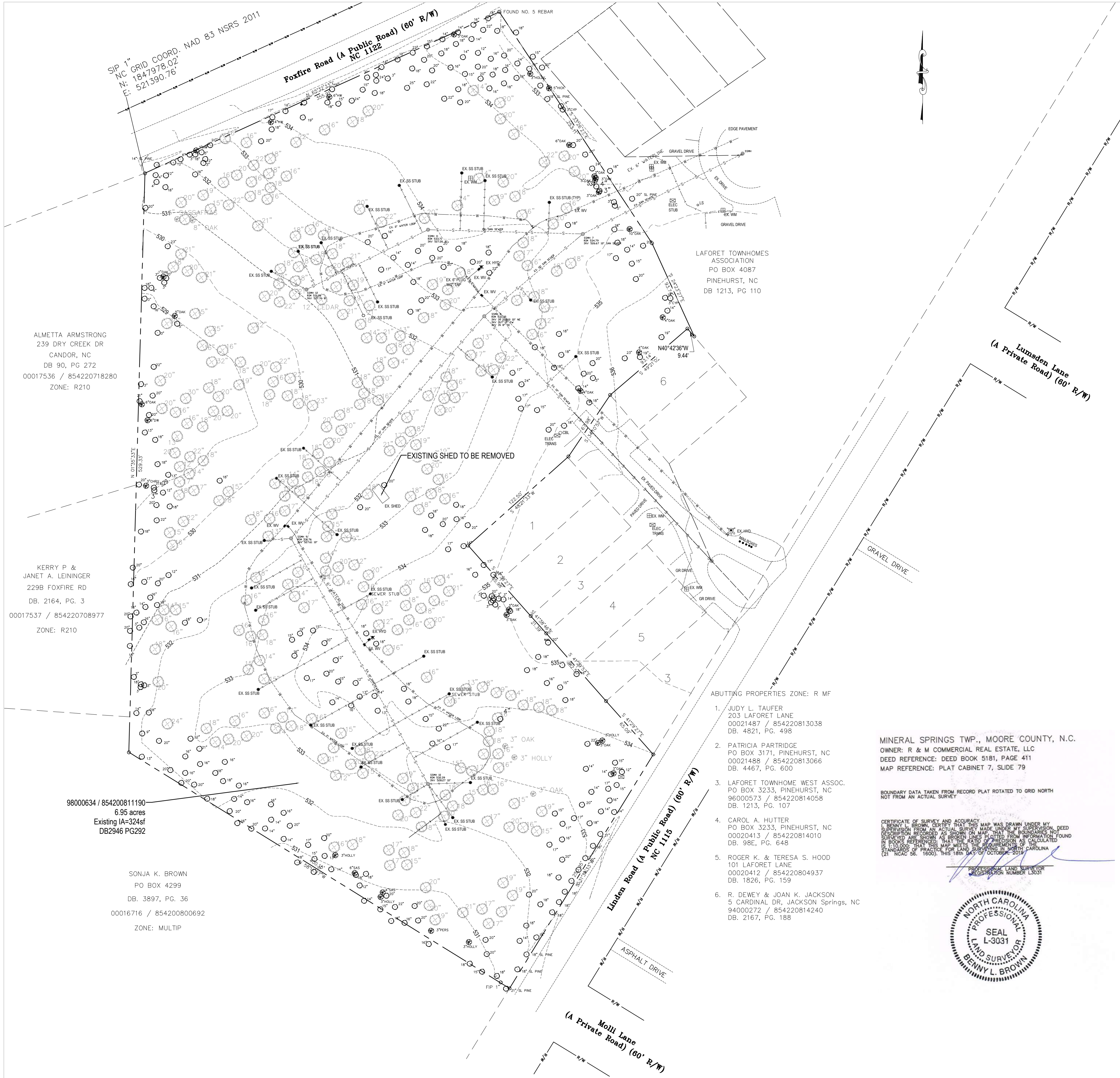
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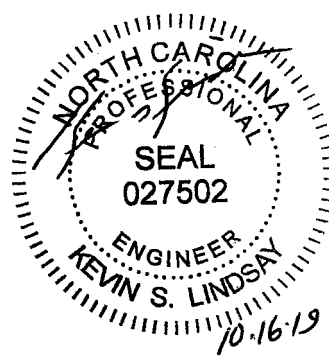
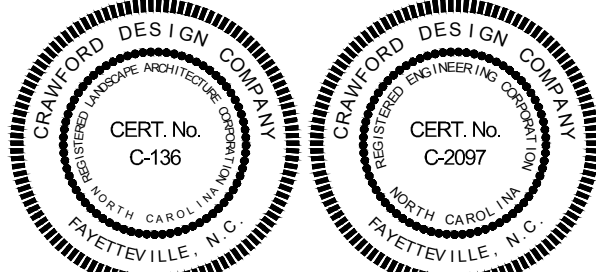
Engineering _____
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Design Company

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Landscape Architecture ♦ Fayetteville, NC
Civil Engineering ♦ Southern Pines, NC
230C W. Pennsylvania Ave. ♦ Southern Pines, NC 28387
Voice: 910-725-1107
www.crawforddsn.com



[PERMIT SET]

REVISIONS

R & M COMMERCIAL REAL ESTATE, LLC

LA FORET

EXISTING CONDITIONS / DEMO PLAN

MINERAL SPRINGS TWP., MOORE COUNTY, N.C.
OWNER: R & M COMMERCIAL REAL ESTATE, LLC
DEED REFERENCE: DEED BOOK 51B1, PAGE 411
MAP REFERENCE: PLAT CABINET 7, SLIDE 79

BOUNDARY DATA TAKEN FROM RECORD PLAT ROTATED TO GRID NORTH
NOT FROM AN ACTUAL SURVEY

CERTIFICATE OF SURVEY AND ACCURACY
I, BUNNY L. BROWN, CERTIFY THAT THIS MAP WAS DRAWN UNDER MY
SUPERVISION FROM AN ACTUAL SURVEY MADE UNDER MY SUPERVISION, DEED
DESCRIPTION PROVIDED AS SHOWN ON THIS MAP, THAT THE INFORMATION I HAVE
SURVEYED AND SHOWN AS BOUND LINES IS BASED ON INFORMATION FOUND
IN BOOKS THAT THIS MAP MEETS THE REQUIREMENTS AS CALCULATED
STANDARDS OF PRACTICE FOR LAND SURVEYING IN NORTH CAROLINA
(21 NCAC 06. 1600). THIS 18th DAY OF OCTOBER 2019

PROFESSIONAL LAND SURVEYOR
REGISTRATION NUMBER L3031



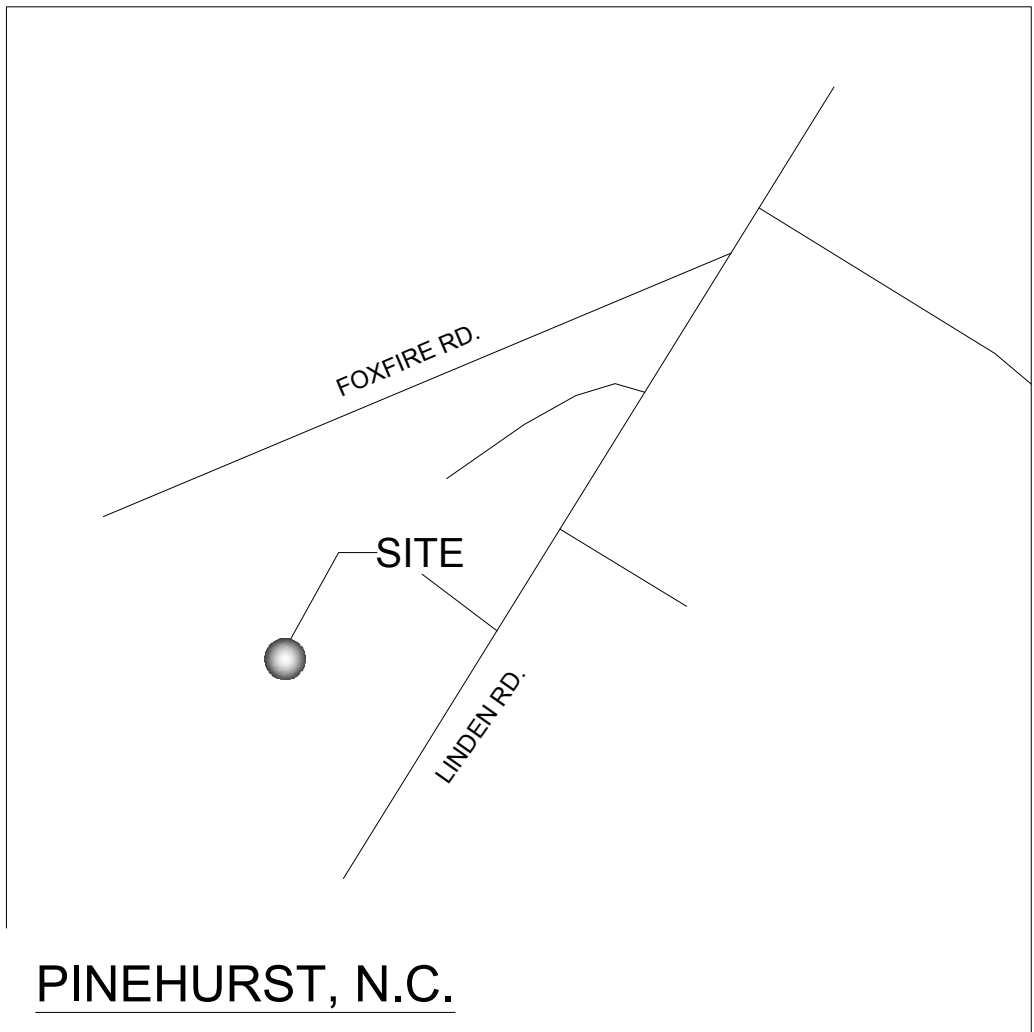
PROJECT DETAILS
Project Manager: KSL
CAD Technician: RFN/GER
Reviewed / Approved By:
Project Number: 18033

SCALE 0 50 100
Full Scale: Horiz.: 1" = 50'
Half Scale: Horiz.: 1" = 100'

ISSUE DATE 09/23/2019

SHEET NUMBER

C1.0



PINEHURST, N.C.

VICINITY MAP (N.T.S.)

SITE KEY NOTES

1. INSTALL 6" SHADOW-BOX FENCE. (SEE DETAIL SHEET 5.3)
2. INSTALL STOP SIGN (SEE DETAIL 5.3)
3. INSTALL 6" SIDEWALK (SEE DETAIL SHEET 5.0)
4. ADA ACCESSIBLE PARKING SPACE WITH SIGN (SEE DETAIL SHEET 5.3)
5. INSTALL CONCRETE WHEELSTOP (SEE DETAIL SHEET 5.1)

GENERAL NOTES

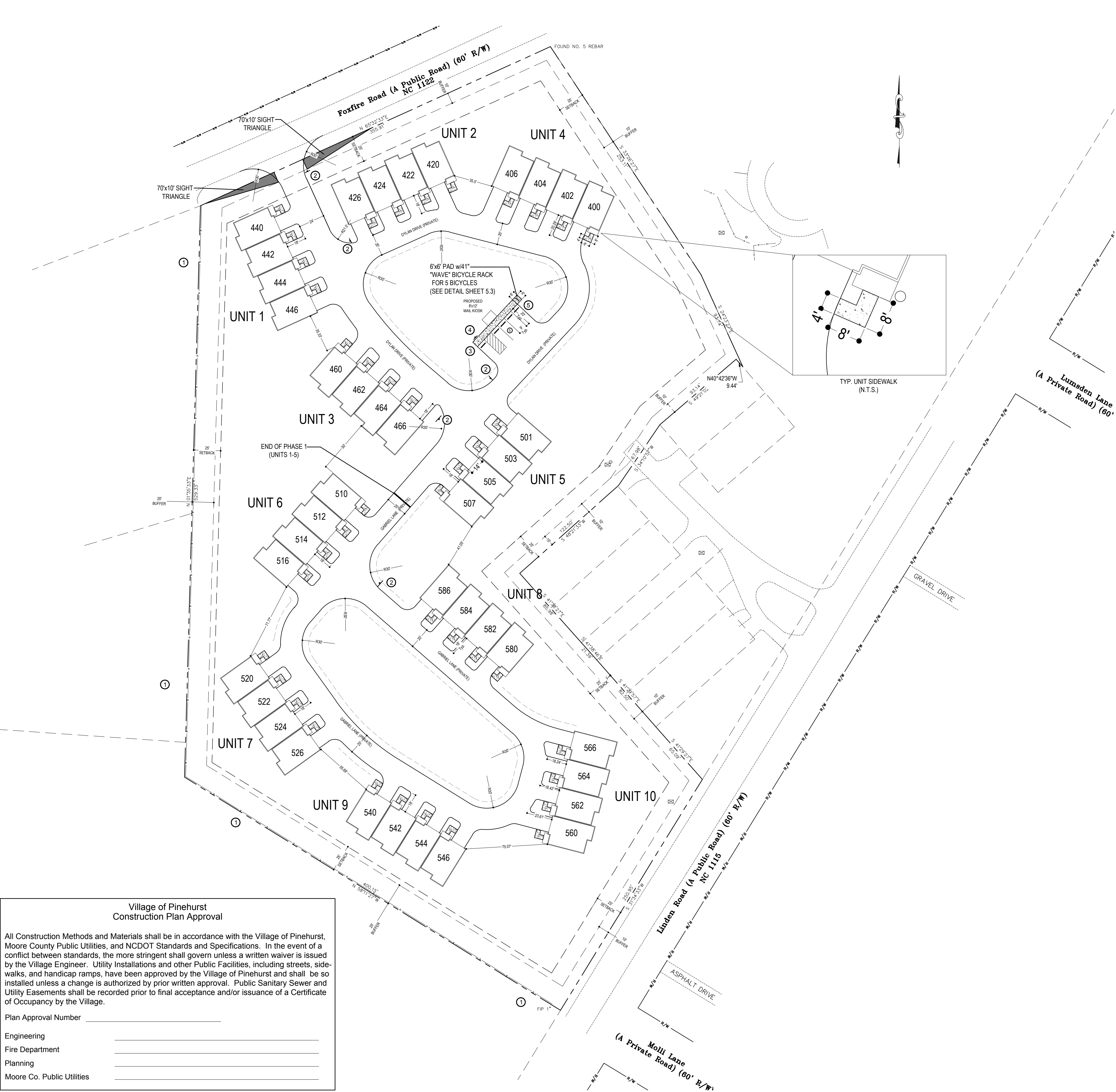
1. SURVEY PROVIDED BY: BENNIE BROWN, 5218 NC HWY 211, PO BOX 307, WEST END NC, 27376 L3031
2. ZONE: R MF
3. WATER AND SANITARY SEWER LOCATIONS VERIFIED BY KEVIN LINDSAY, PE
4. PROPERTY CURRENTLY OWNED BY: R&M COMMERCIAL REAL ESTATE, LLC., 335 FIELDS DRIVE, ABERDEEN NC 28315
5. PARCEL ID SHORT: 98000634
PIN: 854200811190
DB: 2946, PG: 292
6. PROPERTY IS NOT IN 100-YEAR FLOOD PLAIN AS REFERENCED ON FEMA MAP 3710854200J DATED: 10-17-2006
7. WATERSHED: PROPERTY IS IN LUMBER BASIN, STREAM: DROWNING CREEK, TYPE: WS-11-BW.
8. SITE PLAN SHOWS 40 UNITS ON 6.95 ACRES=5.75 UNITS, (< 6 UNITS / AC ALLOWED).
9. VEHICLE USE AREAS SHALL HAVE 2 1/2" ASPHALT OVER 6" ABC OVER COMPACTED SUB-GRADE.
10. PARKING SPACES: 2 PER UNIT, PLUS 1 PER 5 UNITS
TOTAL REQUIRED = 2 X 40 + (1/5) X 40 = 88 SPACES
ADA ACCESSABLE SPACES REQUIRED: 1,
ADA ACCESSABLE SPACES PROVIDED: 1
TOTAL PROVIDED: 1 CAR GARAGES X40=40, +1 SPACES / DRIVEWAY X40=40, +5 AT MAIL KIOSK= 85 TOTAL SPACES PROVIDED + 5 BIKE SPACE (ALT. PARKING) = 90 TOTAL SPACES
11. ISO FIRE FLOW REQUIREMENT IS 500 GPM. (NOTE: BUILDINGS SHALL HAVE AUTOMATIC SPRINKLER SYSTEMS)
12. EXCEPTIONS REQUESTED:
-NO SIDEWALKS--(APPROVED BY VOP)
-NO CURB AND GUTTER--(APPROVED BY VOP)
13. IMPERVIOUS AREAS:
48,532 SF PAVEMENT
2,485 SF OF SIDEWALK
708 SF OF MAIL KIOSK & SIDEWALK
40 TOWN HOMES X 1,086 SF / UNIT = 43,440 SF
95,165 SF=2.185 AC=31.4%
5. THERE ARE NO RED-COCKADED WOODPECKER CAVITY TREES ON THIS PROPERTY AS PER SURVEY BY WETLAND SOLUTIONS.
6. UTILITIES: EXISTING WATER AND SEWER VERIFIED BY KEVIN LINDSAY, PE. DO NOT CONFLICT WITH PLANNED IMPROVEMENTS.
7. ALL EXISTING AND ANY NEW WATER AND SEWER LINES SHALL BE PLACED IN EASEMENTS, IF NOT ALREADY IN AN EASEMENTS. EASEMENT PLAT TO BE APPROVED BY MOORE COUNTY UTILITIES.
8. NCDOT HAS INDICATED THAT THE PROPOSED NEW DRIVEWAY WILL NOT REQUIRE IMPROVEMENTS TO FOXFIRE ROAD. DRIVEWAY PERMIT #63-821371 ISSUED 9-12-2019.
9. ALL UNITS SHALL BE A MINIMUM OF 1,891 SQUARE FEET (HEATED) AND BE LESS THAN 35 FEET IN HEIGHT-AS PER VILLAGE OF PINEHURST REQUIREMENTS.
10. SOLID WASTE PICKUP WILL BE CURBSIDE BINS FOR TRASH AND RECYCLING. YARD DEBRIS SHALL BE REMOVED FROM THE PREMISES AND PROPERLY DISPOSED OF BY THE PRIVATE SERVICE RETAINED BY THE HOA TO MAINTAIN THE COMMON AREAS.

INFRASTRUCTURE INSPECTION NOTICE TO CONTRACTOR

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Village of Pinehurst
Construction Plan Approval

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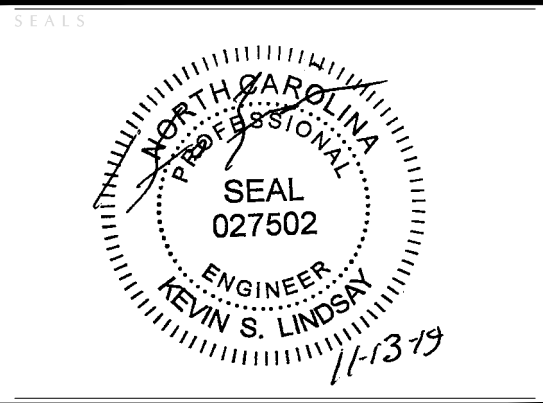
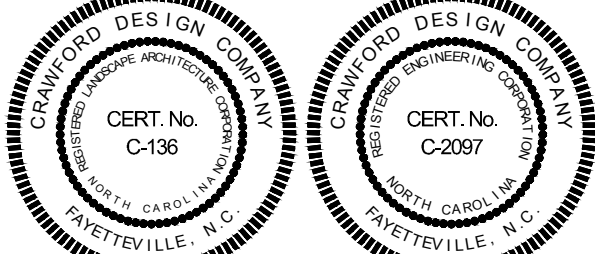
Plan Approval Number _____

Engineering _____
Fire Department _____
Planning _____
Moore Co. Public Utilities _____



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Landscape Architecture ♦ Fayetteville, NC
Civil Engineering ♦ Southern Pines, NC
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Voice: 910-725-1107
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[CONSTRUCTION SET]

REVISIONS

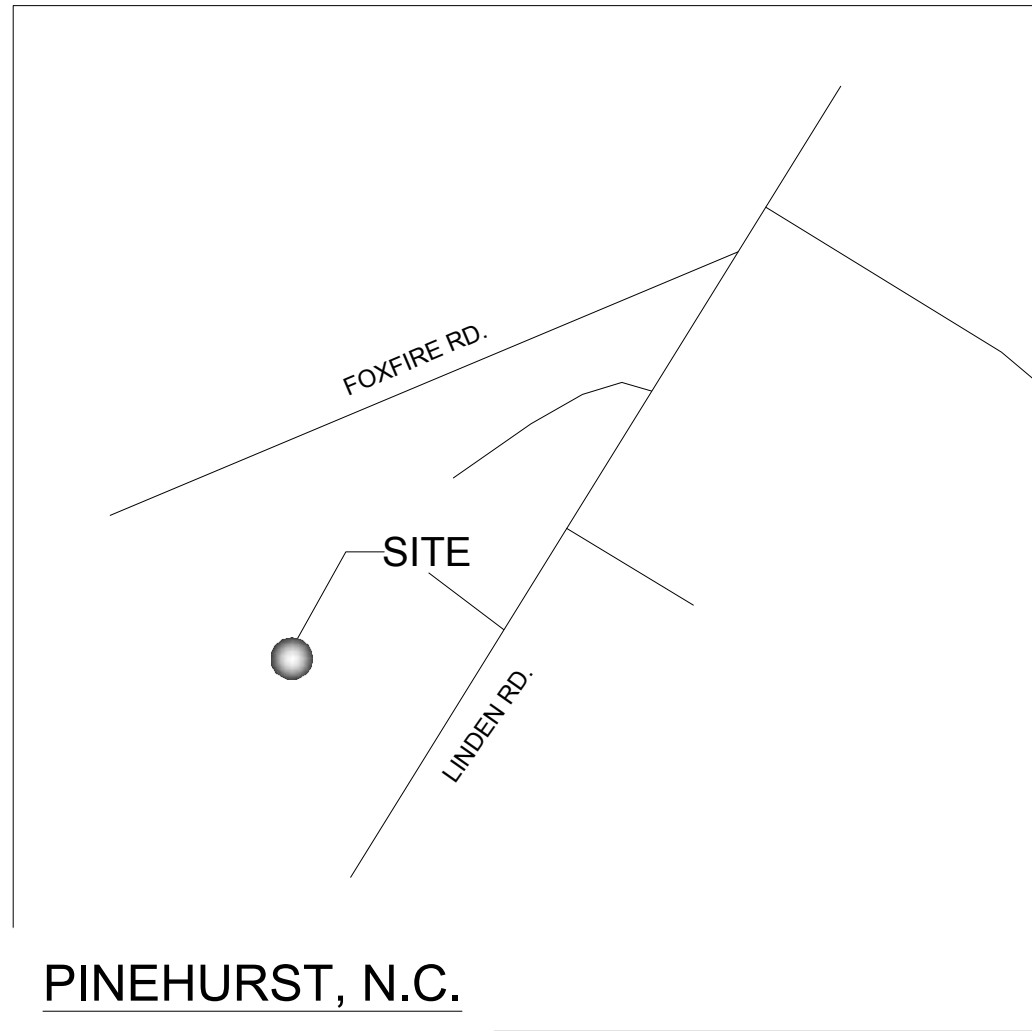
R & M COMMERCIAL REAL ESTATE, LLC

LA FORET

SITE PLAN

PROJECT DETAILS
Project Manager: _____ KSL
CAD Technician: _____ RFNIGER
Reviewed / Approved By: _____
Project Number: _____ 18033
SCALE 0 50 100
Full Scale: Horiz.: 1" = 50'
Half Scale: Horiz.: 1" = 100'
ISSUE DATE 11/13/2019
SHEET NUMBER

C2.0



GRADING / EROSION CONTROL NOTES

1. INSTALL TEMPORARY SEDIMENT FENCING (SEE DETAIL 5.0).
2. INSTALL SILT FENCE OUTLET (SEE DETAIL 5.0)
3. INSTALL GRAVEL CONSTRUCTION ENTRANCE (SEE DETAIL 5.0).
- CONTRACTOR SHALL REPAIR ANY DAMAGE TO THE EXISTING PAVEMENT RELATED TO CONSTRUCTION ACTIVITY.
4. INSTALL TEMPORARY SKIMMER BASINS AND LEVEL SPREADER (SEE DETAIL SHEET 5.0)
5. INSTALL INFILTRATION BASINS (SEE DETAIL SHEET 3.1)
6. INSTALL STRAW WATTLE CULVERT INLET PROTECTION (SEE DETAIL SHEET 5.1)
7. INSTALL LEVEL SPREADER (SEE DETAIL SHEET 5.0)

ADDITIONAL NOTES

1. ALL GENERAL NOTES, ABBREVIATIONS, SYMBOLS, AND OTHER INFORMATION INDICATED ON COVER SHEET C0.0 SHALL APPLY TO THIS PLAN
2. A TEMPORARY BENCHMARK OF THE FIRE HYDRANT ON THE NE WITH AN ELEV=533.55 MAY BE USED. BENCHMARK TO BE SET PRIOR TO CONSTRUCTION
3. PURSUANT TO G.S.113A-57(2), THE ANGLE FOR GRADED SLOPES AND FILLS SHALL BE NO GREATER THAN THE ANGLE THAT CAN BE RETAINED BY VEGETATIVE COVER OR OTHER ADEQUATE EROSION CONTROL DEVICES OR STRUCTURES. IN ANY EVENT, SLOPES LEFT EXPOSED WILL, WITHIN 7 or 14 CALENDAR DAYS OF COMPLETION OF ANY PHASE OF GRADING, BE PLANTED OR OTHERWISE PROVIDED WITH TEMPORARY OR PERMANENT GROUND COVER, DEVICES OR STRUCTURES SUFFICIENT TO RESTRAIN EROSION. PURSUANT TO G.S. 113A-57(3), PROVISIONS FOR PERMANENT GROUND COVER SUFFICIENT TO RESTRAIN EROSION MUST BE ACCOMPLISHED FOR ALL DISTURBED AREAS WITHIN 15 WORKING DAYS OR 90 CALENDAR DAYS (WHICHEVER IS SHORTER) FOLLOWING COMPLETION OF CONSTRUCTION OR DEVELOPMENT. ALL SEEDED AREAS WILL BE FERTILIZED, RE-SEEDED AS NECESSARY, AND MULCHED ACCORDING TO SPECIFICATIONS IN THE VEGETATIVE PLAN TO MAINTAIN A VIGOROUS, DENSE VEGETATION COVER. IF ANY SEEDING FAILURE OCCURS, THOSE AREAS SHALL BE RE-SEEDED WITH RYE GRAIN FOR TEMPORARY STABILIZATION AND PREPARED FOR PERMANENT SEEDING.
4. SEE DETAIL SHEETS FOR EROSION CONTROL MEASURES & MAINTENANCE.
5. CONTACT PERSON: RON JACKSON, R&M COMMERCIAL REAL ESTATE, LLC (910)-844-7435
6. PARCEL IDENTIFICATION NUMBER(S): 98009634 / 654200811190
7. CONTRACTOR SHALL REMOVE TEMPORARY EROSION CONTROL MEASURES ONLY AFTER REMOVAL HAS BE APPROVED BY DENR.
8. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING EROSION AND SEDIMENTATION CONTROL MONITORING ACCORDING TO NPDES PERMIT REQUIREMENTS.
9. SEE SHEET C 5.2 FOR TEMPORARY & PERMANENT SEEDING REQUIREMENTS.

EROSION CONTROL CONSTRUCTION SEQUENCE

1. OBTAIN ALL NECESSARY PERMITS AND APPROVALS AND HOLD PRE-CONSTRUCTION CONFERENCE.
2. INSTALL GRAVEL CONSTRUCTION ENTRANCE.
3. INSTALL TEMPORARY SEDIMENT FENCE AND FENCE OUTLETS.
4. INSTALL TEMPORARY SKIMMER BASINS W/ POROUS BAFFLES.
5. INSTALL SWALES AND CULVERTS.
6. INSTALL CULVERT INLET PROTECTION.
7. COMPLETE SITE WORK.
8. REMOVE TEMPORARY MEASURES ONCE SITE IS STABILIZED AND APPROVED BY ENGINEER AND NCDOT.
9. CONSTRUCT PERMANENT INFILTRATION BASINS AND LEVEL SPREADERS. DO NOT ALLOW HEAVY EQUIPMENT INTO BASIN AREA DURING CONSTRUCTION TO AVOID COMPACTION.
10. PERMANENT INFILTRATION BASINS TO BE MAINTAINED BY: CONTRACTOR UNTIL ACCEPTED BY DEVELOPER OR TURNED OVER TO POA. VILLAGE OF PINEHURST IS NOT RESPONSIBLE FOR SCM MAINTENANCE OR ANY DRAINAGE MAINTENANCE ON THIS SITE.
11. NOTE THAT PERMANENT SCMS ARE ONE FOOT LOWER THAN TEMP. SKIMMER BASINS. CONVERSION TO PERMANENT SCM WILL REQUIRE REMOVAL OF ANY ACCUMULATED SEDIMENT AND ONE FOOT OF IN-SITU SOILS. ANY MATERIAL REMOVED SHALL BE USED ON SITE OR PROPERLY DISPOSED OF OFFSITE IAW ALL LOCAL AND STATE REQUIREMENTS.

Culvert	DA (ac)	Q-25 (cfs)	Inv In	Inv Out	Diam (in)	L(ft)	Slope	Type	Type Entrance	Type Exit	RRD W1 (ft)	RRD W2 (ft)	RRD L (ft)	Type RR	RRD Thickness (in)
2	1.28	4.69	530.25	530.03	18	45.0	0.49%	RCP	FES	FES	4.50	8.50	7	A	12in.
3	2.35	7.54	529.46	528.75	18	42.0	1.69%	RCP	FES	FES	4.50	12.50	11	A	15in.
4	0.21	0.98	530.00	529.50	18	58.0	0.86%	RCP	FES	RCP	4.50	12.50	11	A	15in.
5	0.68	2.16	529.25	529.00	18	50.0	0.50%	RCP	FES	FES	4.50	6.50	5	A	12in.
6	0.45	1.09	529.25	529.03	18	45.0	0.49%	RCP	FES	FES	4.50	6.50	5	A	12in.
8	0.47	1.87	531.33	530.83	18	42.0	1.19%	RCP	YI	RCP	4.00	4.00	4	A	12in.
9	0.72	1.31	529.25	529.05	18	40.0	0.50%	RCP	FES	FES	4.50	6.50	5	A	12in.
11	0.09	0.37	531.00	530.65	15	70.0	0.50%	RCP	FES	FES	3.75	6.25	5	A	12in.

All Rip Rap Dissipaters (RRD) shall have filter fabric under Rip Rap and shall be excavated below swale surface

All lengths are from entrance to exit—including Flared End Sections (FES)

See SCM2 calculations for Culvert 8 (riser outlet pipe)

Village of Pinehurst
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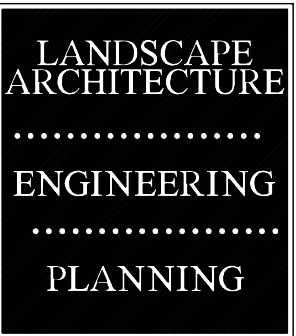
Swale Summary						
	Minimum Depth (ft)	Bottom Width (ft)	Side Slope	Top Width (ft)	Channel Slope %	Channel
1a	0.26 ft	2.00 ft	6:1	5.12 ft	1.00%	Straw
1b	0.17 ft	2.00 ft	6:1	4.04 ft	1.45%	Straw
2	0.10 ft	2.00 ft	6:1	4.16 ft	3.49%	Straw
3a	0.33 ft	2.00 ft	6:1	5.96 ft	1.55%	Straw
3b	0.35 ft	2.00 ft	6:1	6.20 ft	2.63%	Straw
4	0.17 ft	2.00 ft	6:1	4.04 ft	1.45%	Straw
5a	0.16 ft	2.00 ft	6:1	3.92 ft	3.46%	Straw
5b	0.11 ft	2.00 ft	6:1	3.32 ft	4.55%	Straw
6a	0.16 ft	2.00 ft	6:1	3.92 ft	1.98%	Straw

Swale Summary						
	Minimum Depth (ft)	Bottom Width (ft)	Side Slope	Top Width (ft)	Channel Slope %	Channel
6b	0.09 ft	2.00 ft	6:1	3.08 ft	3.89%	Straw
7a	0.56 ft	2.00 ft	6:1	8.67 ft	1.76%	Straw
7b	0.33 ft	2.00 ft	6:1	5.91 ft	2.21%	Straw
7c	0.41 ft	2.00 ft	6:1	6.92 ft	0.81%	Straw
9a	0.09 ft	2.00 ft	6:1	3.08 ft	3.43%	Straw
9b	0.11 ft	2.00 ft	6:1	3.32 ft	2.67%	Straw
10a	0.14 ft	2.00 ft	6:1	3.68 ft	1.38%	Straw

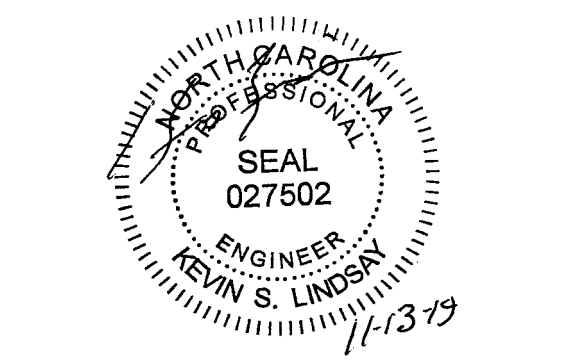
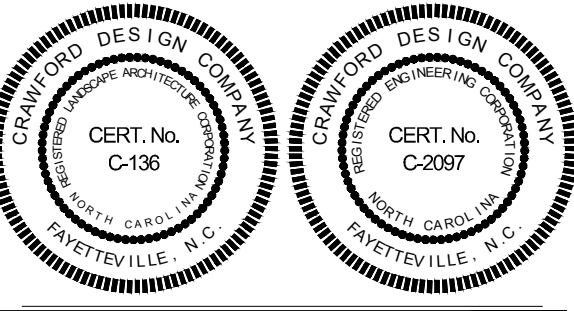


STABILIZATION TIME FRAME		
Site Area Description	Stabilization Time Frame	Stabilization Time Frame Exceptions
Perimeter dikes, swales, ditches and slopes	7 days	None
High Quality Water (HQW) Zones	7 days	None
Slopes steeper than 3:1	7 days	If slopes are 10' or less in length and are not steeper than 2:1, 14 days are allowed
Slopes 3:1 or flatter	14 days	7-days for slopes greater than 50 feet in length
All other areas with slopes flatter than 4:1	14 days	None (except for perimeters and HQW Zones)

*"Extensions of time may be approved by the permitting authority based on weather or other site-specific condition that make compliance impracticable." (Section II.B(2)(b))



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Civil Engineering ♦ Southern Pines, NC
230C W. Pennsylvania Ave. ♦ Southern Pines, NC 28387
Voice: 910-725-1107
www.crawforddesign.com



[CONSTRUCTION SET]

PROJECT DETAILS

Project Manager: KSL
CAD Technician: RFN/GER
Reviewed / Approved By: _____
Project Number: 18033

ISSUE DATE: 11/13/2019

SHEET NUMBER

Full Scale: Horiz.: 1" = 50'
Half Scale: Horiz.: 1" = 100'

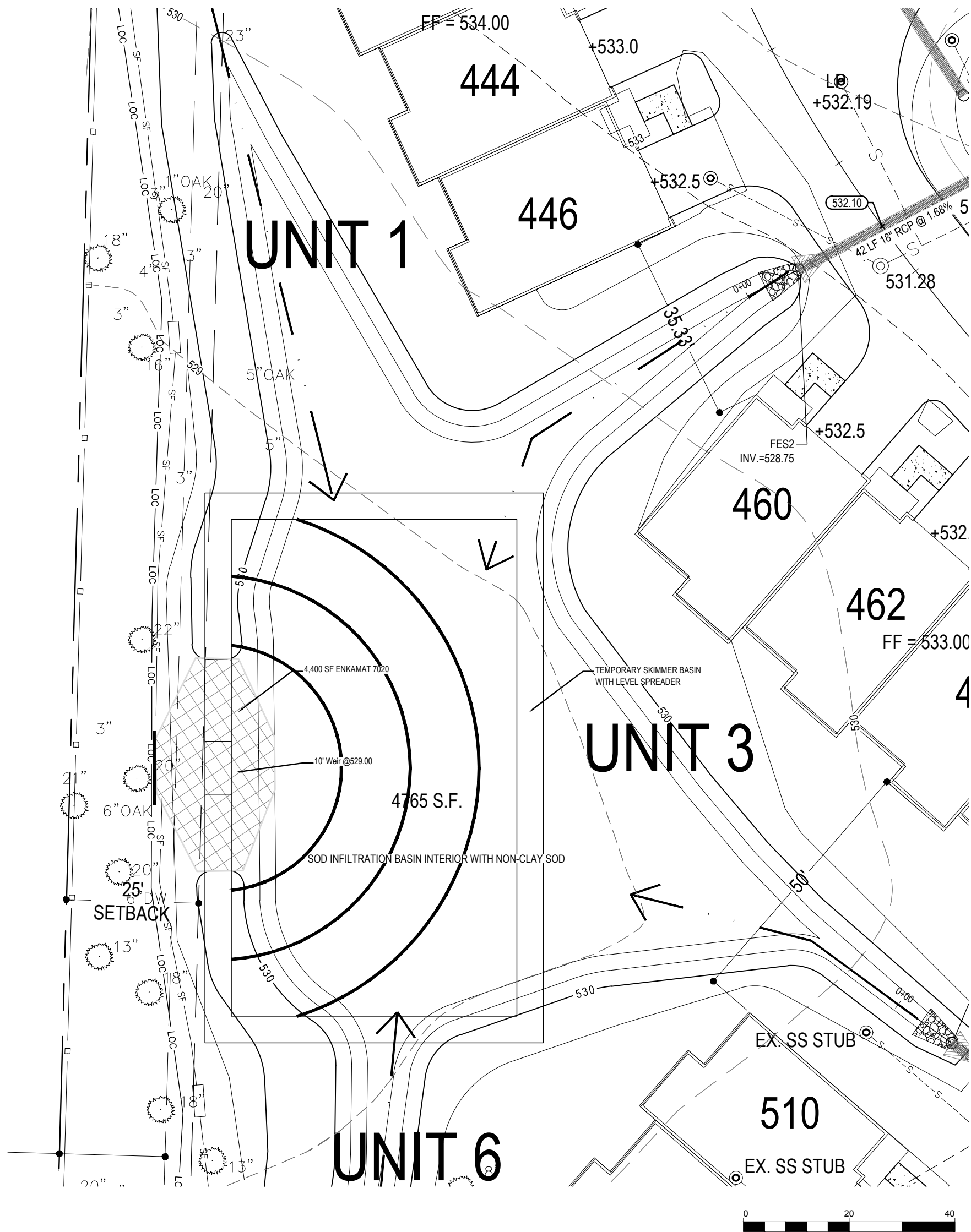
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LA FORET

R & M COMMERCIAL REAL ESTATE, LLC

GRADING, DRAINAGE AND EROSION CONTROL PLAN

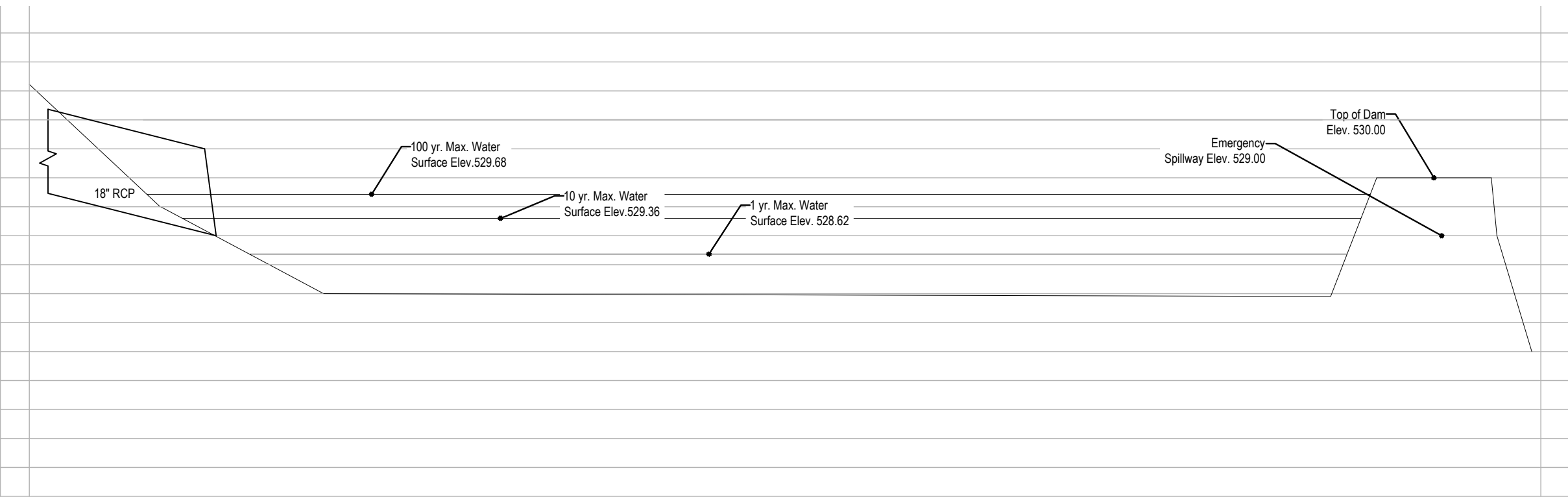
C3.0



Maintenance Requirements:
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1. Mow banks (as needed, at least monthly during mowing season).
2. Observe and repair eroded areas (MONTHLY).
3. Observe and remove debris from inlets (MONTHLY).
4. Remove unwanted vegetation and trash (MONTHLY).
5. Inspect for structural damage (YEARLY).
6. Inspect embankment for damage (YEARLY).
7. Inspect and remove sediment (monthly for one year and yearly after that).

Attachment B-Hydraulic Calculations Summary									
Item	Existing	Post Development					La Foret		
	Lot + off site	1-WO SCM	2-WO wSCM	WS-1 SCM	WS-2 wSCM	3-WO SCM	WS-3 wSCM	Non SCM	Total
Drainage Area (ac)	7.912	5.038	0.466			1.458		0.949	7.912
Curve Number	52.09	65.8			65.71	66.24		52.11	197.77
C-Value	0.213	0.426			0.428		0.434	0.213	1.29
Q, 1-yr Storm (cfs)	8.73	11.13	0.00	1.03	0.21	3.28	0.00	1.05	1.26
Q, 10-yr Storm (cfs)	12.29	15.66	6.20	1.46	0.48	4.61	0.00	1.47	8.16
Q, 100-Yr Storm (cfs)	16.42	20.93	16.76	1.95	1.87	6.17	3.88	1.97	24.48
Peak Redux Onfile				4"	532.00				
Peak Redux Weir									
Primary Riser Outlet				4'x4'	533.00				
Emergency Weir L/EL		10.00	529.00	16.00	533.00	20.00	530.00		
Top of Berm		10'@	530.00	ROAD	533.50	10'@	531.00		



Notes:

1. Embankment shall be constructed of clean structural soil, free of roots, vegetation, rocks, and other objectionable material.
2. Scarify surfaces before placing any required fill, which is to be placed in lifts of 6"-8", then compacted.

Village of Pinehurst
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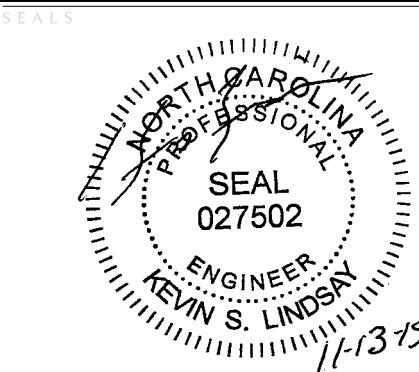
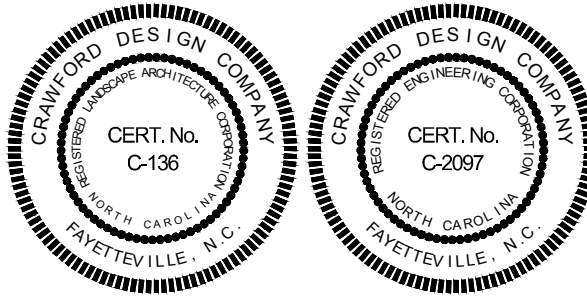
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[CONSTRUCTION SET]

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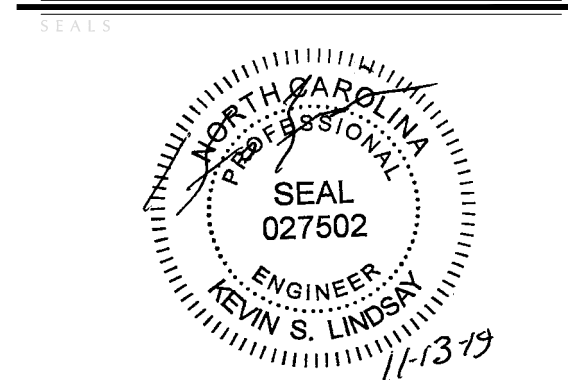
LA FORET

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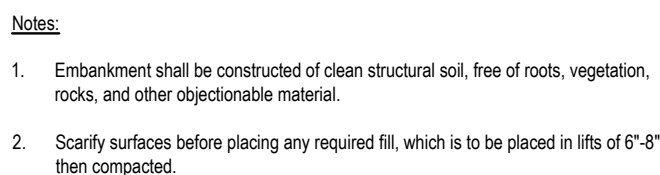
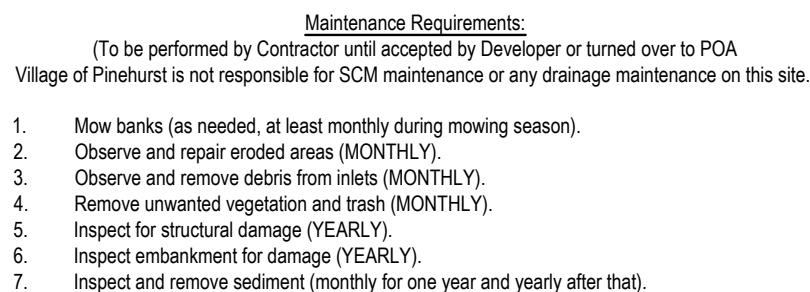
PROJECT DETAILS:
Project Manager: KSL
CAD Technician: RFN/GER
Reviewed / Approved By: _____
Project Number: 18033

SCALE
ISSUE DATE 11/13/2019
SHEET NUMBER

C3.1



100 90 80 70 60 50 40 30 20 10 0



Riser Structure Design Summary			
Item	Values		
	Elevation	Total #	Size
Riser Structure	n/a	1	4' x 4'
Wear, A=	533.00	1	16"
Peak Redux Orf. B=	532.00	1	4.0"
Water Qual/NP, C=	N/A	1	
Outlet Pipe, D=	531.33	1	18"
Bottom Inside Struct., E=	530.50	N/A	N/A



Engineering	
Fire Department	
Planning	
Moore Co. Public Utilities	

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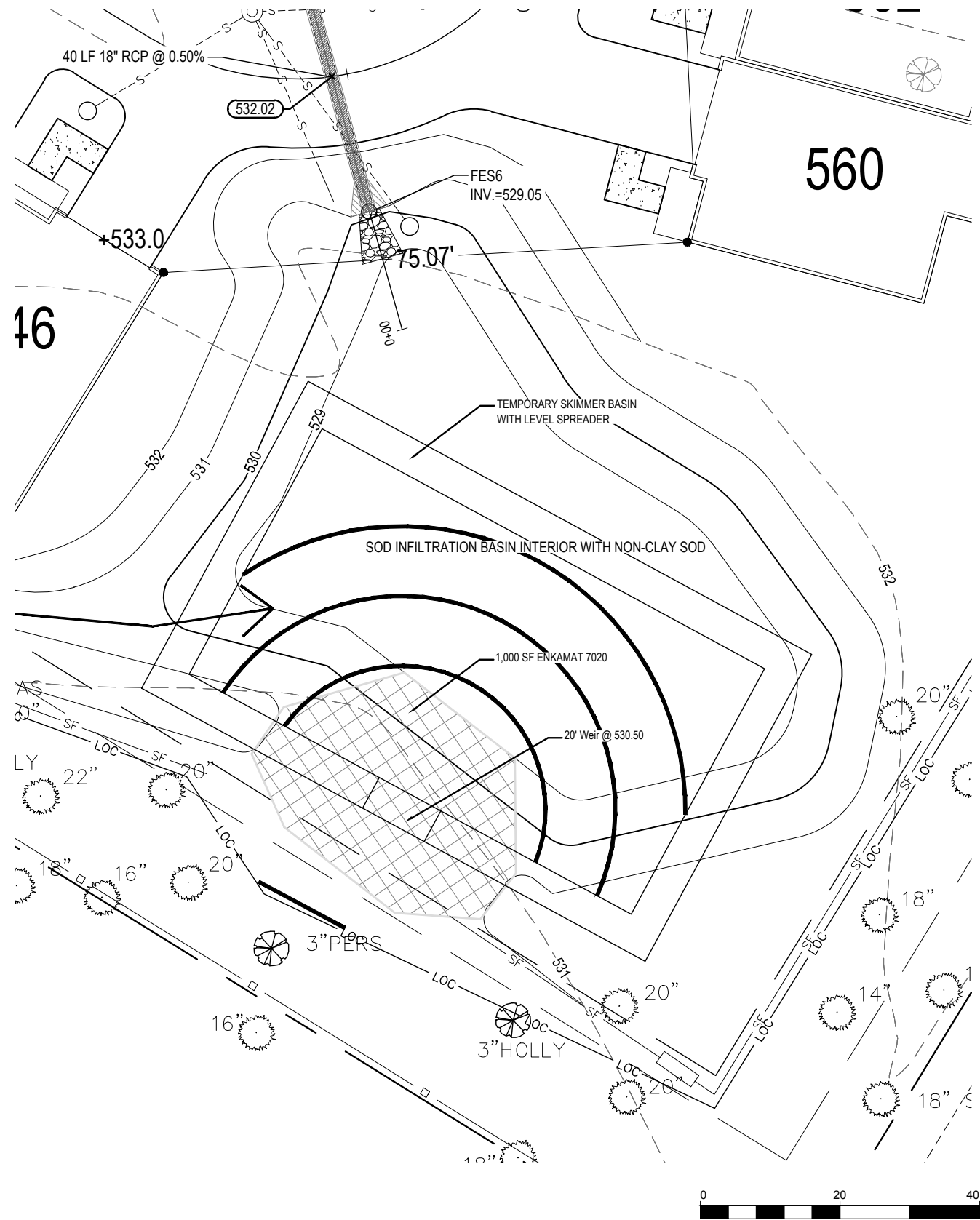
LA FORET

SCM-2

PROJECT DETAILS	
Project Manager:	KSL
CAD Technician:	RFN/GER
Reviewed / Approved By:	
Project Number:	18033

SCALE	
ISSUE DATE	11/13/2019
SHEET NUMBER	

C3.2



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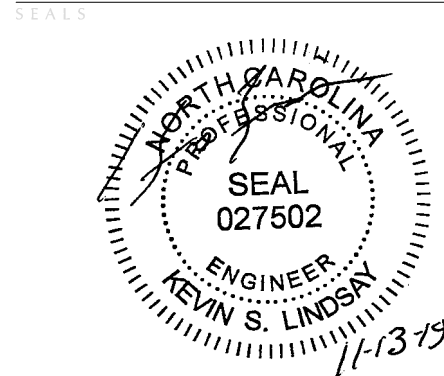
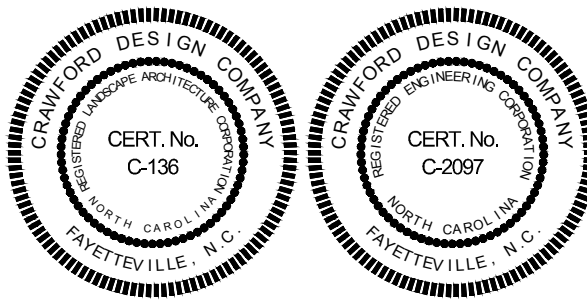
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4. Installation of water and sewer mains and services including pressure testing, pipe laying, chlorination of water mains, bacterial testing, mandrel pulls, etc. necessary to meet the Village's Utility ordinances. **NOTE: The Contractor shall also contact Moore County Public Utilities Department Engineering Division at 947-6315 to schedule utility inspections as required by MCPUD.**
5. Installation of formwork and placement of concrete (sidewalks, curb & gutter, etc.) within the public right of way.
6. Installation of storm drainage systems (pipes, trenches, catch basins, frames/grates, outlet protection, etc.)

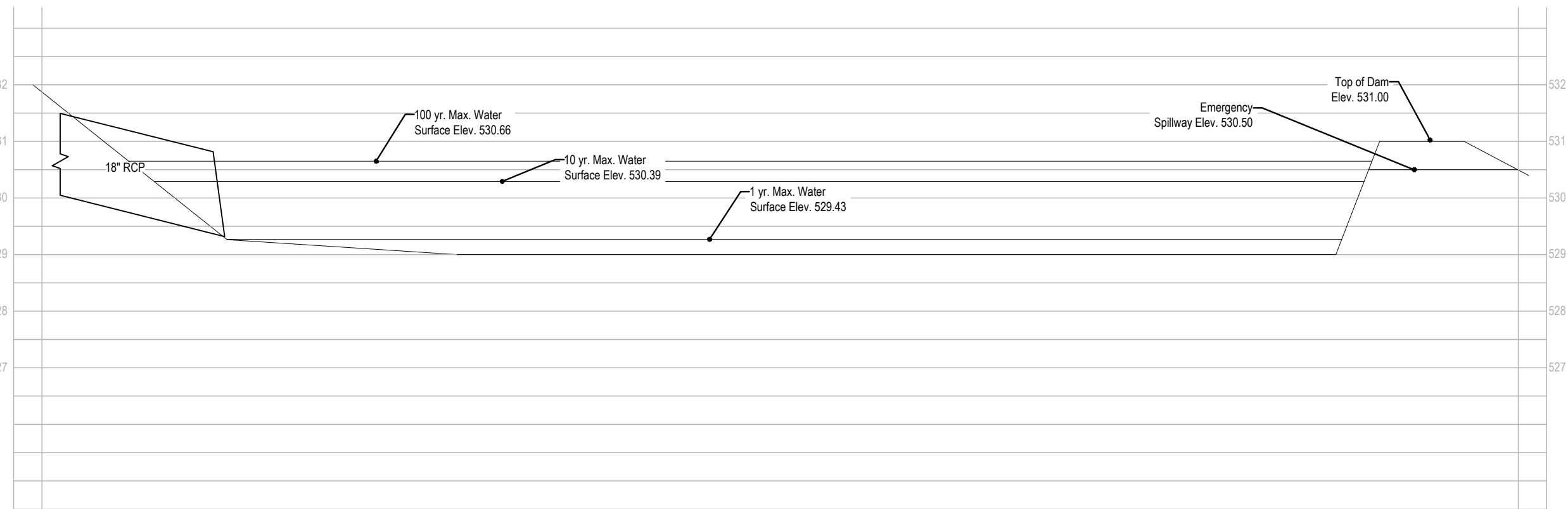
Failure to schedule the required inspections shall be grounds for rejection of all work not inspected and issuance of a stop-work order until the project is in compliance



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[CONSTRUCTION SET]



Notes:

1. Embankment shall be constructed of clean structural soil, free of roots, vegetation, rocks, and other objectionable material.
2. Scarify surfaces before placing any required fill, which is to be placed in lifts of 6\"-8\", then compacted.

Attachment B--Hydraulic Calculations Summary									
Item	Existing Lot + off site	Post Development				La Foret			
		1-WO SCM	WS-1 wSCM	2-WO SCM	WS-2 wSCM	3-WO SCM	WS-3 wSCM	Non SCM	Total
Drainage Area (ac)	7.912	5.038		0.466		1.458		0.949	7.912
Curve Number	52.09	65.8		65.71		66.24		52.11	197.77
C-Value	0.213	0.426		0.428		0.434		0.213	1.29
Q, 1-yr Storm (cfs)	8.73	11.13	0.00	1.03	0.21	3.28	0.00	1.05	1.26
Q, 10-yr Storm (cfs)	12.29	15.66	6.20	1.46	0.48	4.61	0.00	1.47	8.16
Q, 100-Yr Storm (cfs)	16.42	20.93	16.76	1.95	1.87	6.17	3.88	1.97	24.48
Peak Redux Orifice				4"	532.00				
Peak Redux Weir									
Primary Riser Outlet				4\"X4"	533.00				
Emergency Weir L/EL		10.00	529.00	16.00	533.00	20.00	530.00		
Top of Berm		10'@	530.00	ROAD	533.50	10'@	531.00		

R & M COMMERCIAL REAL ESTATE, LLC

LA FORET

SCM-3

PROJECT DETAILS:
Project Manager: KSL
CAD Technician: RFN/GER
Reviewed / Approved By:
Project Number: 18033

SCALE

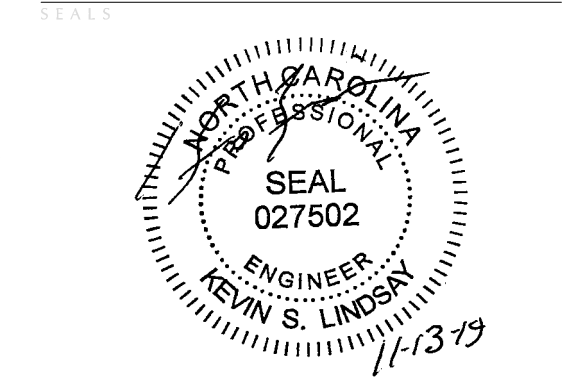
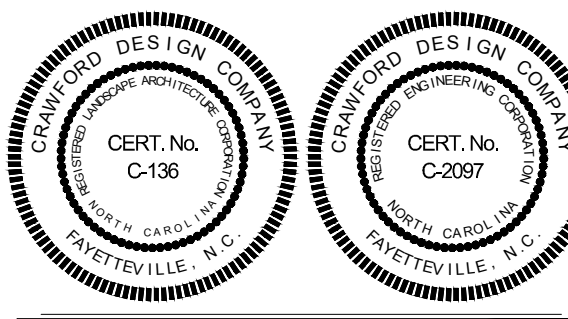
ISSUE DATE 11/13/2019

SHEET NUMBER

C3.3



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[CONSTRUCTION SET]

REVISIONS

R & M COMMERCIAL REAL ESTATE, LLC
LA FORET

PROJECT DETAILS:
Project Manager: KSL
CAD Technician: RFN/GER
Reviewed / Approved By:
Project Number: 18033

SCALE

ISSUE DATE: 11/13/2019
SHEET NUMBER

C3.4

GROUND STABILIZATION AND MATERIALS HANDLING PRACTICES FOR COMPLIANCE WITH THE NCG01 CONSTRUCTION GENERAL PERMIT

Implementing the details and specifications on this plan sheet will result in the construction activity being considered compliant with the Ground Stabilization and Materials Handling sections of the NCG01 Construction General Permit (Sections E and F, respectively). The permittee shall comply with the Erosion and Sediment Control plan approved by the delegated authority having jurisdiction. All details and specifications shown on this sheet may not apply depending on site conditions and the delegated authority having jurisdiction.

SECTION E: GROUND STABILIZATION

Required Ground Stabilization Timeframes		
Site Area Description	Stabilize within this many calendar days after ceasing land disturbance	Timeframe variations
(a) Perimeter dikes, swales, ditches, and perimeter slopes	7	None
(b) High Quality Water (HQW) Zones	7	None
(c) Slopes steeper than 3:1	7	If slopes are 10' or less in length and are not steeper than 2:1, 14 days are allowed
(d) Slopes 3:1 to 4:1	14	-7 days for slopes greater than 50' in length and with slopes steeper than 4:1 -7 days for perimeter dikes, swales, ditches, perimeter slopes and HQW Zones -10 days for Falls Lake Watershed
(e) Areas with slopes flatter than 4:1	14	-7 days for perimeter dikes, swales, ditches, perimeter slopes and HQW Zones -10 days for Falls Lake Watershed unless there is zero slope

Note: After the permanent cessation of construction activities, any areas with temporary ground stabilization shall be converted to permanent ground stabilization as soon as practicable but in no case longer than 90 calendar days after the last land disturbing activity. Temporary ground stabilization shall be maintained in a manner to render the surface stable against accelerated erosion until permanent ground stabilization is achieved.

GROUND STABILIZATION SPECIFICATION

Stabilize the ground sufficiently so that rain will not dislodge the soil. Use one of the techniques in the table below:

Temporary Stabilization	Permanent Stabilization
<ul style="list-style-type: none">Temporary grass seed covered with straw or other mulches and tackifiersHydroseedingRolled erosion control products with or without temporary grass seedAppropriately applied straw or other mulchPlastic sheeting	<ul style="list-style-type: none">Permanent grass seed covered with straw or other mulches and tackifiersGeotextile fabrics such as permanent soil reinforcement mattingHydroseedingShrubs or other permanent plantings covered with mulchUniform and evenly distributed ground cover sufficient to restrain erosionStructural methods such as concrete, asphalt or retaining wallsRolled erosion control products with grass seed

POLYACRYLAMIDES (PAMS) AND FLOCCULANTS

- Select flocculants that are appropriate for the soils being exposed during construction, selecting from the *NC DWR List of Approved PAMS/Flocculants*.
- Apply flocculants at or before the inlets to Erosion and Sediment Control Measures.
- Apply flocculants at the concentrations specified in the *NC DWR List of Approved PAMS/Flocculants* and in accordance with the manufacturer's instructions.
- Provide ponding area for containment of treated Stormwater before discharging offsite.
- Store flocculants in leak-proof containers that are kept under storm-resistant cover or surrounded by secondary containment structures.

EQUIPMENT AND VEHICLE MAINTENANCE

- Maintain vehicles and equipment to prevent discharge of fluids.
- Provide drip pans under any stored equipment.
- Identify leaks and repair as soon as feasible, or remove leaking equipment from the project.
- Collect all spent fluids, store in separate containers and properly dispose as hazardous waste (recycle when possible).
- Remove leaking vehicles and construction equipment from service until the problem has been corrected.
- Bring used fuels, lubricants, coolants, hydraulic fluids and other petroleum products to a recycling or disposal center that handles these materials.

LITTER, BUILDING MATERIAL AND LAND CLEARING WASTE

- Never bury or burn waste. Place litter and debris in approved waste containers.
- Provide a sufficient number and size of waste containers (e.g. dumpster, trash receptacle) on site to contain construction and domestic wastes.
- Locate waste containers at least 50 feet away from storm drain inlets and surface waters unless no other alternatives are reasonably available.
- Locate waste containers on areas that do not receive substantial amounts of runoff from upland areas and does not drain directly to a storm drain, stream or wetland.
- Cover waste containers at the end of each workday and before storm events or provide secondary containment. Repair or replace damaged waste containers.
- Anchor all lightweight items in waste containers during times of high winds.
- Empty waste containers as needed to prevent overflow. Clean up immediately if containers overflow.
- Dispose waste off-site at an approved disposal facility.
- On business days, clean up and dispose of waste in designated waste containers.

PAINT AND OTHER LIQUID WASTE

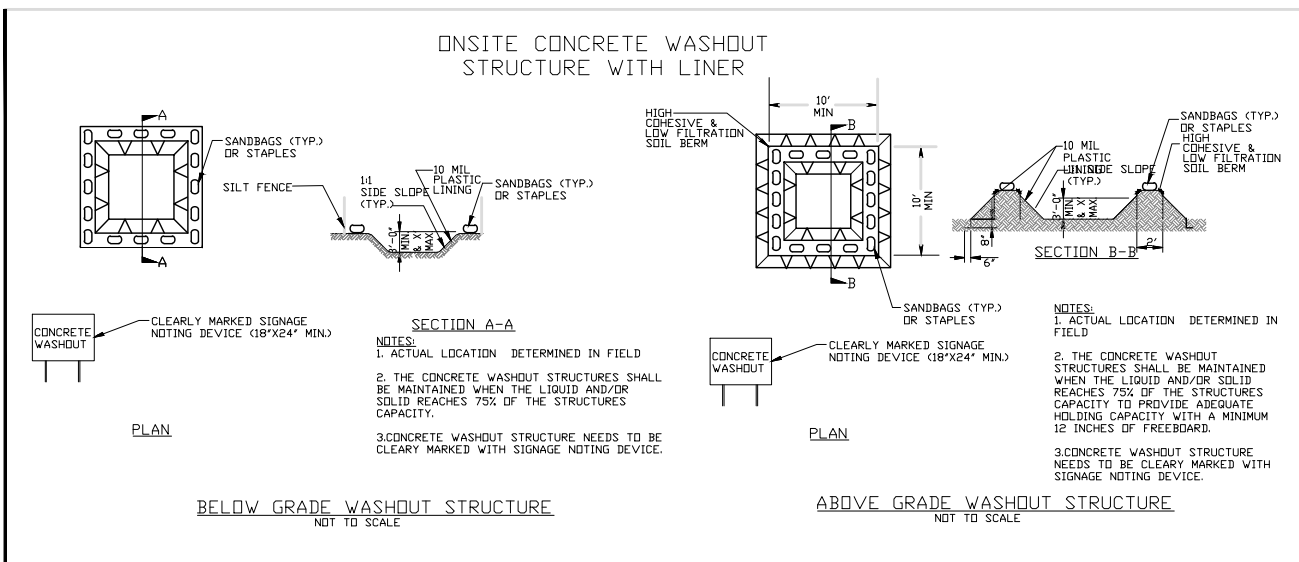
- Do not dump paint and other liquid waste into storm drains, streams or wetlands.
- Locate paint washouts at least 50 feet away from storm drain inlets and surface waters unless no other alternatives are reasonably available.
- Contain liquid wastes in a controlled area.
- Containment must be labeled, sized and placed appropriately for the needs of site.
- Prevent the discharge of soaps, solvents, detergents and other liquid wastes from construction sites.

PORTABLE TOILETS

- Install portable toilets on level ground, at least 50 feet away from storm drains, streams or wetlands unless there is no alternative reasonably available. If 50 foot offset is not attainable, provide relocation of portable toilet behind silt fence or place on a gravel pad and surround with sand bags.
- Provide staking or anchoring of portable toilets during periods of high winds or in high foot traffic areas.
- Monitor portable toilets for leaking and properly dispose of any leaked material. Utilize a licensed sanitary waste hauler to remove leaking portable toilets and replace with properly operating unit.

EARTHEN STOCKPILE MANAGEMENT

- Show stockpile locations on plans. Locate earthen-material stockpile areas at least 50 feet away from storm drain inlets, sediment basins, perimeter sediment controls and surface waters unless it can be shown no other alternatives are reasonably available.
- Protect stockpile with silt fence installed along toe of slope with a minimum offset of five feet from the toe of stockpile.
- Provide stable stone access point when feasible.
- Stabilize stockpile within the timeframes provided on this sheet and in accordance with the approved plan and any additional requirements. Soil stabilization is defined as vegetative, physical or chemical coverage techniques that will restrain accelerated erosion on disturbed soils for temporary or permanent control needs.



CONCRETE WASHOUTS

- Do not discharge concrete or cement slurry from the site.
- Dispose of, or recycle settled, hardened concrete residue in accordance with local and state solid waste regulations and at an approved facility.
- Manage washout from mortar mixers in accordance with the above item and in addition place the mixer and associated materials on impervious barrier and within lot perimeter silt fence.
- Install temporary concrete washouts per local requirements, where applicable. If an alternate method or product is to be used, contact your approval authority for review and approval. If local standard details are not available, use one of the two types of temporary concrete washouts provided on this detail.
- Do not use concrete washouts for dewatering or storing defective curb or sidewalk sections. Stormwater accumulated within the washout may not be pumped into or discharged to the storm drain system or receiving surface waters. Liquid waste must be pumped out and removed from project.
- Locate washouts at least 50 feet from storm drain inlets and surface waters unless it can be shown that no other alternatives are reasonably available. At a minimum, install protection of storm drain inlet(s) closest to the washout which could receive spills or overflow.
- Locate washouts in an easily accessible area, on level ground and install a stone entrance pad in front of the washout. Additional controls may be required by the approving authority.
- Install at least one sign directing concrete trucks to the washout within the project limits. Post signage on the washout itself to identify this location.
- Remove leavings from the washout when at approximately 75% capacity to limit overflow events. Replace the tarp, sand bags or other temporary structural components when no longer functional. When utilizing alternative or proprietary products, follow manufacturer's instructions.
- At the completion of the concrete work, remove remaining leavings and dispose of in an approved disposal facility. Fill pit, if applicable, and stabilize any disturbance caused by removal of washout.

HERBICIDES, PESTICIDES AND RODENTICIDES

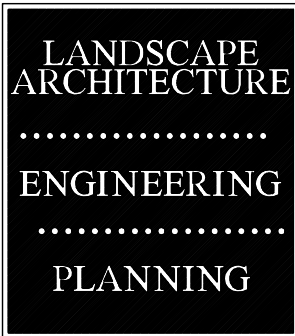
- Store and apply herbicides, pesticides and rodenticides in accordance with label restrictions.
- Store herbicides, pesticides and rodenticides in their original containers with the label, which lists directions for use, ingredients and first aid steps in case of accidental poisoning.
- Do not store herbicides, pesticides and rodenticides in areas where flooding is possible or where they may spill or leak into wells, stormwater drains, ground water or surface water. If a spill occurs, clean area immediately.
- Do not stockpile these materials onsite.

HAZARDOUS AND TOXIC WASTE

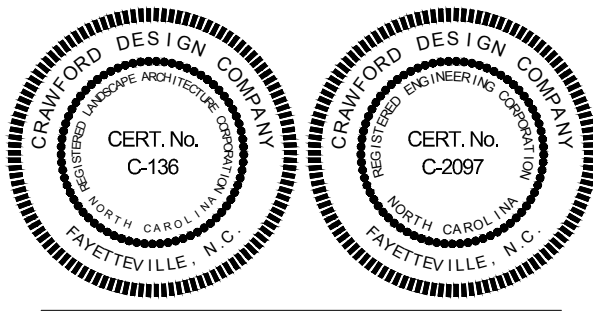
- Create designated hazardous waste collection areas on-site.
- Place hazardous waste containers under cover or in secondary containment.
- Do not store hazardous chemicals, drums or bagged materials directly on the ground.

NCG01 GROUND STABILIZATION AND MATERIALS HANDLING

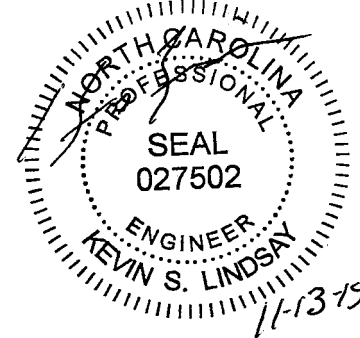
EFFECTIVE: 04/01/19



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SEALS



INFRASTRUCTURE INSPECTION NOTICE TO CONTRACTOR

This is to advise you that the Village of Pinehurst is now requiring a **minimum** of Forty-eight (48) hours of notice when requesting an Engineering Inspection. Inspection requests may be made by calling the Public Services Department at 295-5021. *Items requiring an Engineering Inspection include, but are not limited to:*

- Subgrade inspection/proof rolling (streets, sidewalks, firelanes, etc.) Density tests from an approved geotechnical engineering firm may be required.
- Placement and inspection of base course materials including proof-rolling. Density tests from a Village-approved geotechnical engineering firm may be required/accepted by the Village.
- Placement and compaction of pavement materials including concrete and asphalt surface courses. Includes stringlines/grade control, paving & rolling operations, material inspections.
- Installation of water and sewer mains and services including pressure testing, pipe laying, chlorination of water mains, bacterial testing, mandrel pulls, etc. necessary to meet the Village's Utility ordinances. NOTE: The Contractor shall also contact Moore County Public Utilities Department Engineering Division at 947-6315 to schedule utility inspections as required by MCPUD.
- Installation of formwork and placement of concrete (sidewalks, curb & gutter, etc.) within the public right of way.
- Installation of storm drainage systems (pipes, trenches, catch basins, frames/grates, outlet protection, etc.)

Failure to schedule the required inspections shall be grounds for rejection of all work not inspected and issuance of a stop-work order until the project is in compliance

Village of Pinehurst
Construction Plan Approval

All Construction Methods and Materials shall be in accordance with the Village of Pinehurst, Moore County Public Utilities, and NCDOT Standards and Specifications. In the event of a conflict between standards, the more stringent shall govern unless a written waiver is issued by the Village Engineer. Utility Installations and other Public Facilities, including streets, sidewalks, and handicap ramps, have been approved by the Village of Pinehurst and shall be so installed unless a change is authorized by prior written approval. Public Sanitary Sewer and Utility Easements shall be recorded prior to final acceptance and/or issuance of a Certificate of Occupancy by the Village.

Plan Approval Number _____

Engineering _____
Fire Department _____
Planning _____
Moore Co. Public Utilities _____

R & M COMMERCIAL REAL ESTATE, LLC

LA FORET

PROJECT DETAILS:
Project Manager: KSL
CAD Technician: RFN/GER
Reviewed / Approved By: _____
Project Number: 18033

SCALE

ISSUE DATE 11/13/2019

SHEET NUMBER

C3.5

PART III
SELF-INSPECTION, RECORDKEEPING AND REPORTING

SECTION A: SELF-INSPECTION

Self-inspections are required during normal business hours in accordance with the table below. When adverse weather or site conditions would cause the safety of the inspection personnel to be in jeopardy, the inspection may be delayed until the next business day on which it is safe to perform the inspection. In addition, when a storm event of equal to or greater than 1.0 inch occurs outside of normal business hours, the self-inspection shall be performed upon the commencement of the next business day. Any time when inspections were delayed shall be noted in the Inspection Record.

Inspect	Frequency (during normal business hours)	Inspection records must include:
(1) Rain gauge maintained in good working order	Daily	Daily rainfall amounts. If no daily rain gauge observations are made during weekend or holiday periods, and no individual day rainfall information is available, record the cumulative rain measurement for those unattended days (and this will determine if a site inspection is needed). Days on which no rainfall occurred shall be recorded as "zero." The permittee may use another rain-monitoring device approved by the Division.
(2) E&SC Measures	At least once per 7 calendar days and within 24 hours of a rain event ≥ 1.0 inch in 24 hours	1. Identification of the measures inspected, 2. Date and time of the inspection, 3. Name of the person performing the inspection, 4. Indication of whether the measures were operating properly, 5. Description of maintenance needs for the measure, 6. Description, evidence, and date of corrective actions taken.
(3) Stormwater discharge outfalls (SDOs)	At least once per 7 calendar days and within 24 hours of a rain event ≥ 1.0 inch in 24 hours	1. Identification of the discharge outfalls inspected, 2. Date and time of the inspection, 3. Name of the person performing the inspection, 4. Evidence of indicators of stormwater pollution such as oil sheen, floating or suspended solids or discoloration, 5. Indication of visible sediment leaving the site, 6. Description, evidence, and date of corrective actions taken.
(4) Perimeter of site	At least once per 7 calendar days and within 24 hours of a rain event ≥ 1.0 inch in 24 hours	If visible sedimentation is found outside site limits, then a record of the following shall be made: 1. Actions taken to clean up or stabilize the sediment that has left the site limits, 2. Description, evidence, and date of corrective actions taken, and 3. An explanation as to the actions taken to control future releases.
(5) Streams or wetlands on-site or off-site (where accessible)	At least once per 7 calendar days and within 24 hours of a rain event ≥ 1.0 inch in 24 hours	If the stream or wetland has increased visible sedimentation or a stream has visible increased turbidity from the construction activity, then a record of the following shall be made: 1. Description, evidence and date of corrective actions taken, and 2. Records of the required reports to the appropriate Division Regional Office per Part III, Section C, Item (2)(a) of this permit.
(6) Ground stabilization measures	After each phase of grading	1. The phase of grading (installation of perimeter E&SC measures, clearing and grubbing, installation of storm drainage facilities, completion of all land-disturbing activity, construction or redevelopment, permanent ground cover). 2. Documentation that the required ground stabilization measures have been provided within the required timeframe or an assurance that they will be provided as soon as possible.

NOTE: The rain inspection resets the required 7 calendar day inspection requirement.

PART II, SECTION G, ITEM (4)
DRAW DOWN OF SEDIMENT BASINS FOR MAINTENANCE OR CLOSE OUT

Sediment basins and traps that receive runoff from drainage areas of one acre or more shall use outlet structures that withdraw water from the surface when these devices need to be drawn down for maintenance or close out unless this is infeasible. The circumstances in which it is not feasible to withdraw water from the surface shall be rare (for example, times with extended cold weather). Non-surface withdrawals from sediment basins shall be allowed only when all of the following criteria have been met:

- The E&SC plan authority has been provided with documentation of the non-surface withdrawal and the specific time periods or conditions in which it will occur. The non-surface withdrawal shall not commence until the E&SC plan authority has approved these items,
- The non-surface withdrawal has been reported as an anticipated bypass in accordance with Part III, Section C, Item (2)(c) and (d) of this permit,
- Dewatering discharges are treated with controls to minimize discharges of pollutants from stormwater that is removed from the sediment basin. Examples of appropriate controls include properly sited, designed and maintained dewatering tanks, weir tanks, and filtration systems,
- Vegetated, upland areas of the sites or a properly designed stone pad is used to the extent feasible at the outlet of the dewatering treatment devices described in Item (c) above,
- Velocity dissipation devices such as check dams, sediment traps, and riprap are provided at the discharge points of all dewatering devices, and
- Sediment removed from the dewatering treatment devices described in Item (c) above is disposed of in a manner that does not cause deposition of sediment into waters of the United States.

PART III
SELF-INSPECTION, RECORDKEEPING AND REPORTING

SECTION B: RECORDKEEPING

1. E&SC Plan Documentation

The approved E&SC plan as well as any approved deviation shall be kept on the site. The approved E&SC plan must be kept up-to-date throughout the coverage under this permit. The following items pertaining to the E&SC plan shall be kept on site and available for inspection at all times during normal business hours.

Item to Document	Documentation Requirements
(a) Each E&SC measure has been installed and does not significantly deviate from the locations, dimensions and relative elevations shown on the approved E&SC plan.	Initial and date each E&SC measure on a copy of the approved E&SC plan or complete, date and sign an inspection report that lists each E&SC measure shown on the approved E&SC plan. This documentation is required upon the initial installation of the E&SC measures or if the E&SC measures are modified after initial installation.
(b) A phase of grading has been completed.	Initial and date a copy of the approved E&SC plan or complete, date and sign an inspection report to indicate completion of the construction phase.
(c) Ground cover is located and installed in accordance with the approved E&SC plan.	Initial and date a copy of the approved E&SC plan or complete, date and sign an inspection report to indicate compliance with approved ground cover specifications.
(d) The maintenance and repair requirements for all E&SC measures have been performed.	Complete, date and sign an inspection report.
(e) Corrective actions have been taken to E&SC measures.	Initial and date a copy of the approved E&SC plan or complete, date and sign an inspection report to indicate the completion of the corrective action.

2. Additional Documentation to be Kept on Site

In addition to the E&SC plan documents above, the following items shall be kept on the site and available for inspectors at all times during normal business hours, unless the Division provides a site-specific exemption based on unique site conditions that make this requirement not practical:

- This General Permit as well as the Certificate of Coverage, after it is received.
- Records of inspections made during the previous twelve months. The permittee shall record the required observations on the Inspection Record Form provided by the Division or a similar inspection form that includes all the required elements. Use of electronically-available records in lieu of the required paper copies will be allowed if shown to provide equal access and utility as the hard-copy records.

3. Documentation to be Retained for Three Years

All data used to complete the e-NOI and all inspection records shall be maintained for a period of three years after project completion and made available upon request. [40 CFR 122.41]

PART III
SELF-INSPECTION, RECORDKEEPING AND REPORTING

SECTION C: REPORTING

1. Occurrences that Must be Reported

Permittees shall report the following occurrences:

- Visible sediment deposition in a stream or wetland.
- Oil spills if:
 - They are 25 gallons or more,
 - They are less than 25 gallons but cannot be cleaned up within 24 hours,
 - They cause sheen on surface waters (regardless of volume), or
 - They are within 100 feet of surface waters (regardless of volume).

- Releases of hazardous substances in excess of reportable quantities under Section 311 of the Clean Water Act (Ref: 40 CFR 110.3 and 40 CFR 117.3) or Section 102 of CERCLA (Ref: 40 CFR 302.4) or G.S. 143-215.85.

- Anticipated bypasses and unanticipated bypasses.

- Noncompliance with the conditions of this permit that may endanger health or the environment.

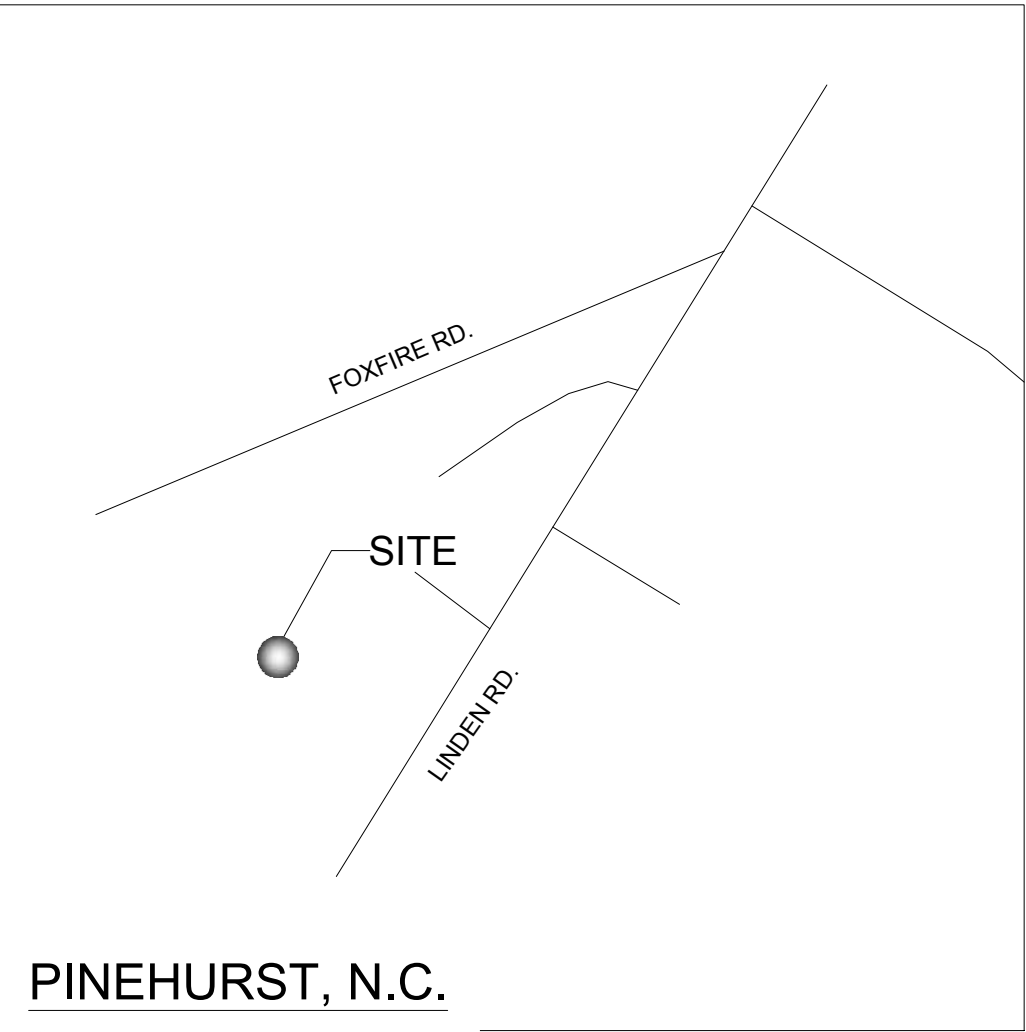
2. Reporting Timeframes and Other Requirements

After a permittee becomes aware of an occurrence that must be reported, he shall contact the appropriate Division regional office within the timeframes and in accordance with the other requirements listed below. Occurrences outside normal business hours may also be reported to the Department's Environmental Emergency Center personnel at (800) 858-0368.

Occurrence	Reporting Timeframes (After Discovery) and Other Requirements
(a) Visible sediment deposition in a stream or wetland	<ul style="list-style-type: none">Within 24 hours, an oral or electronic notification.Within 7 calendar days, a report that contains a description of the sediment and actions taken to address the cause of the deposition. Division staff may waive the requirement for a written report on a case-by-case basis.If the stream is named on the NC 303(d) list as impaired for sediment-related causes, the permittee may be required to perform additional monitoring, inspections or apply more stringent practices if staff determine that additional requirements are needed to assure compliance with the federal or state impaired-waters conditions.
(b) Oil spills and release of hazardous substances per Item 1(b)-(c) above	<ul style="list-style-type: none">Within 24 hours, an oral or electronic notification. The notification shall include information about the date, time, nature, volume and location of the spill or release.
(c) Anticipated bypasses [40 CFR 122.41(m)(3)]	<ul style="list-style-type: none">A report at least ten days before the date of the bypass, if possible. The report shall include an evaluation of the anticipated quality and effect of the bypass.
(d) Unanticipated bypasses [40 CFR 122.41(m)(3)]	<ul style="list-style-type: none">Within 24 hours, an oral or electronic notification.Within 7 calendar days, a report that includes an evaluation of the quality and effect of the bypass.
(e) Noncompliance with the conditions of this permit that may endanger health or the environment[40 CFR 122.41(l)(7)]	<ul style="list-style-type: none">Within 24 hours, an oral or electronic notification.Within 7 calendar days, a report that contains a description of the noncompliance, and its causes; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time noncompliance is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance. [40 CFR 122.41(l)(6).Division staff may waive the requirement for a written report on a case-by-case basis.

NCG01 SELF-INSPECTION, RECORDKEEPING AND REPORTING

EFFECTIVE: 04/01/19



PINEHURST, N.C.

VICINITY MAP(N.T.S.)



ADDITIONAL NOTES

1. ALL GENERAL NOTES, ABBREVIATIONS, SYMBOLS, AND OTHER INFORMATION INDICATED ON COVER SHEET SHALL APPLY TO ALL OTHER SHEETS IN THIS PLAN.
2. ALL ELEVATIONS AND DIMENSIONS ARE BASED ON SURVEY BY DENNIE BROWN, 5218 NC HWY 211, PO BOX 307, WEST END NC, 27376 L3031
3. EXISTING WATER AND SEWER ARE SHOWN BASED ON DESIGN DRAWINGS AND RECORDED PLAT.

UTILITY KEY NOTES

1. NOT USED
2. ASSUMED LOCATION. FIELD VERIFY AND CONTACT ENGINEER IF DIFFERENT.
3. CUT SS LATERAL AND INSTALL NEW CO (ABANDON LINE PAST NEW CO)
4. RESERVE EXISTING SS LATERAL FOR FUTURE PROJECT
5. INSTALL SEWER CLEANOUT FRAME AND COVER AS PER MOORE CO. DETAIL SS-7 (SEE SHEET 5.3)

SANITARY SEWER SERVICE NOTES

1. MOORE COUNTY PUBLIC UTILITIES - (910) 947-4315
2. SANITARY SEWER SERVICES & MAINS SHALL HAVE A MINIMUM COVER OF 36-INCHES OR AS REQUIRED BY CODE.
3. CONTRACTOR SHALL COORDINATE INSTALLATION OF SANITARY SEWER MAINS & SERVICES w/ MOORE COUNTY PUBLIC UTILITIES.
4. ALL SANITARY SEWER MAINS & SERVICES SHALL BE INSTALLED & AIR-TESTED ACCORDING TO MOORE COUNTY PUBLIC UTILITIES & STATE SPECIFICATIONS & REQUIREMENTS.
5. CONTRACTOR SHALL MAINTAIN A HORIZONTAL CLEARANCE BETWEEN ALL WATER & SANITARY SEWER MAINS OF AT LEAST 10 FEET.
6. THE MINIMUM VERTICAL CLEARANCE BETWEEN WATER & SANITARY SEWER LINES SHALL BE 18-INCHES UNLESS DUCTILE IRON IS SPECIFIED. THE MINIMUM VERTICAL CLEARANCE BETWEEN SANITARY SEWER & STORM DRAINAGE LINES SHALL BE 24-INCHES UNLESS DUCTILE IRON IS SPECIFIED.
7. CONTRACTOR SHALL NOTIFY MOORE COUNTY PUBLIC UTILITIES AND THE VILLAGE OF PINEHURST AND ENGINEER OF RECORD FORTY-EIGHT (48) HOURS IN ADVANCE PRIOR TO INSTALL SANITARY SEWER MAINS / SERVICES.
8. CONTRACTOR SHALL NOT OBSTRUCT MAINTENANCE OR ACCESS TO UTILITIES LOCATED WITHIN EASEMENTS.
9. ALL EXISTING UTILITIES SHALL BE ADJUSTED TO FINAL GRADE IN ACCORDANCE WITH MOORE COUNTY PUBLIC UTILITIES STANDARDS.
10. ALL 44 EXISTING SEWER SERVICES (S) OF WHICH ARE SHOWN ON EXISTING CONDITION SHEET) SHALL BE USED FOR NEW TOWNHOMES OR SHALL BE ABANDONED AT THE MAIN.

WATER SERVICE NOTES

1. WATER MAINS AND SERVICE LATERALS SHALL HAVE A MINIMUM COVER OF 36-INCHES OR DIP SHALL BE USED. IF 42-INCHES OF COVER CANNOT BE PROVIDED AND DIP IS NOT SHOWN ON THE PLANS, CONSULT WITH THE ENGINEER (PRIOR TO USE OF DIP).
2. CONTRACTOR SHALL COORDINATE INSTALLATION OF WATER MAINS & SERVICES w/ MOORE COUNTY PUBLIC UTILITIES.
3. INSTALLATION AND TESTING OF ALL WATER MAINS & SERVICES SHALL MEET ALL MOORE COUNTY PUBLIC UTILITIES, THE VILLAGE OF PINEHURST & STATE SPECIFICATIONS & REQUIREMENTS.
4. CONTRACTOR SHALL MAINTAIN A HORIZONTAL CLEARANCE BETWEEN ALL WATER AND SANITARY SEWER MAINS OF AT LEAST 10 FEET. WHEN NECESSARY, AND WITH THE PERMISSION OF THE ENGINEER AND MOORE COUNTY PUBLIC UTILITIES, THE SEPARATION DISTANCE CAN BE REDUCED TO 5 FEET IF THE WATER LINE MAINTAINS A VERTICAL CLEARANCE OF AT LEAST 18-INCHES ABOVE THE SEWER LINE. IF A SEWER LINE MUST BE ROUTED ABOVE A WATER LINE, THEN BOTH MUST BE MADE OF DIP WITH JOINTS EQUIVALENT TO WATER MAIN STANDARDS-WITH A SECTION OF WATER MAIN CENTERED UNDERNEATH THE SEWER MAIN.
5. WATER MAINS CROSSING OVER, OR UNDER, STORM SEWERS MUST MAINTAIN A VERTICAL SEPARATION OF AT LEAST 12-INCHES. IN ADDITION, IF A WATER MAIN MUST CROSS UNDER A STORM SEWER, IT SHALL BE MADE OF DIP FOR A MINIMUM OF 10 FEET ON BOTH SIDES OF THE CROSSING.
6. CONTRACTOR SHALL INSTALL MECHANICALLY RESTRAINED JOINTS PER MOORE COUNTY PUBLIC UTILITIES & STATE REQUIREMENTS.
7. CONTRACTOR SHALL NOTIFY MOORE COUNTY PUBLIC UTILITIES, THE VILLAGE OF PINEHURST AND ENGINEER OF RECORD FORTY-EIGHT (48) HOURS IN ADVANCE PRIOR TO INSTALL WATER MAINS / SERVICES.
8. CONTRACTOR SHALL NOT OBSTRUCT MAINTENANCE OR ACCESS TO UTILITIES LOCATED WITHIN EASEMENTS.
9. ALL 44 EXISTING WATER LATERAL LINES SHALL BE USED FOR NEW TOWNHOMES OR SHALL BE ABANDONED AT THE MAIN. METER BOXES SHALL BE INSTALLED AT END OF CURRENT LINE. OR LINE SHALL BE SHORTENED. NO EXISTING WATER LATERAL LINES SHALL BE EXTENDED.
10. DEVELOPER TO INSTALL RESIDENTIAL SPRINKLER SYSTEM OFF DOMESTIC WATERLINE-NO SEPARATE TAP.

UTILITY CONSTRUCTION NOTES:

(NOTE: NO WATER OR SEWER MAIN EXTENSION ARE PLANNED FOR THIS PROJECT, BUT NOTES BELOW WILL APPLY IF ANY ARE ADDED. ALSO, PORTIONS OF THESE NOTES APPLY TO EXISTING SERVICES)

1. ALL WATER MAINS, LATERALS AND APPURTENANCES SHALL BE INSTALLED AND TESTED IN ACCORDANCE WITH MCPU AND VILLAGE OF PINEHURST STANDARDS.
2. ALL SEWER MAINS, LATERALS, AND APPURTENANCES SHALL BE INSTALLED AND TESTED IN ACCORDANCE WITH MCPU AND VILLAGE OF PINEHURST STANDARDS.
3. ALL CONSTRUCTION TO BE IN ACCORDANCE WITH MCPU, VILLAGE OF PINEHURST AND STATE STANDARDS.
4. CONTRACTOR SHALL FIELD VERIFY THE LOCATION OF EXISTING UTILITIES PRIOR TO CONSTRUCTION.
5. CONTRACTOR SHALL PROVIDE A MINIMUM OF 48 HOURS NOTICE FOR ALL WATER OUTAGES.
6. ALL NEW WATER AND SEWER MAINS, LATERALS, AND APPURTENANCES SHALL BE TESTED AND/OR DISINFECTED IN ACCORDANCE WITH MOORE COUNTY PUBLIC UTILITIES AND THE VILLAGE OF PINEHURST STANDARDS PRIOR TO PLACING INTO SERVICE.
7. CONTRACTOR SHALL COORDINATE TESTING AND INSPECTION WITH THE MOORE COUNTY PUBLIC UTILITIES AND THE VILLAGE OF PINEHURST PROJECT COORDINATOR.
8. ALL DUCTILE IRON PIPE IN SANITARY SEWER SERVICE SHALL HAVE AN INTERIOR LINING OF PROTECTION 401 OR APPROVED EQUAL.
9. ALL NEW MANHOLES ARE TO BE VACUUM-TESTED IN ACCORDANCE WITH MOORE COUNTY PUBLIC UTILITIES STANDARDS.
10. CONTRACTOR SHALL ABANDON ("KILL-OUT") ANY EXISTING WATER SERVICES THAT WILL NOT BE UTILIZED BY CUTTING THE SERVICE AT THE MAIN, PLUGGING THE CORPORATION, AND TURNING OFF THE CORPORATION. AT THE METER BOX, THE ABANDONED SERVICE IS TO BE CUT OR CRIMPED, AND BURIED A MINIMUM OF 3 FEET BELOW GRADE.
11. CONTRACTOR SHALL ABANDON ("KILL-OUT") ANY EXISTING SEWER SERVICES THAT WILL NOT BE UTILIZED BY UNCOVERING THE EXISTING LATERAL AT THE MAIN, CUT AND PLUG AT BOTH ENDS, REMOVE THE EXISTING CLEANOUT AND COMBINATION, AND PLUG THE TAP OR TEE AT THE MAIN. FOR LATERALS THAT CONNECT TO A MANHOLE AND ARE TO BE ABANDONED ("KILLED/OUT"), THE LATERAL SHALL BE REMOVED FROM THE MANHOLE AND THE REMAINING VOID IN THE MANHOLE SHALL BE FILLED WITH BLOCK AND NON-SHRINK GROUT.
12. ALL EXISTING UTILITIES IMPACTED BY CONSTRUCTION SHALL BE ADJUSTED TO FINISHED GRADE IN ACCORDANCE WITH MOORE COUNTY PUBLIC UTILITIES REQUIREMENTS.

Village of Pinehurst Construction Plan Approval

All Construction Methods and Materials shall be in accordance with the Village of Pinehurst, Moore County Public Utilities, and NCDOT Standards and Specifications. In the event of a conflict between standards, the more stringent shall govern unless a written waiver is issued by the Village Engineer. Utility Installations and other Public Facilities, including streets, sidewalks, and handicap ramps, have been approved by the Village of Pinehurst and shall be so installed unless a change is authorized by prior written approval. Public Sanitary Sewer and Utility Easements shall be recorded prior to final acceptance and/or issuance of a Certificate of Occupancy by the Village.

Plan Approval Number _____

Engineering _____

Fire Department _____

Planning _____

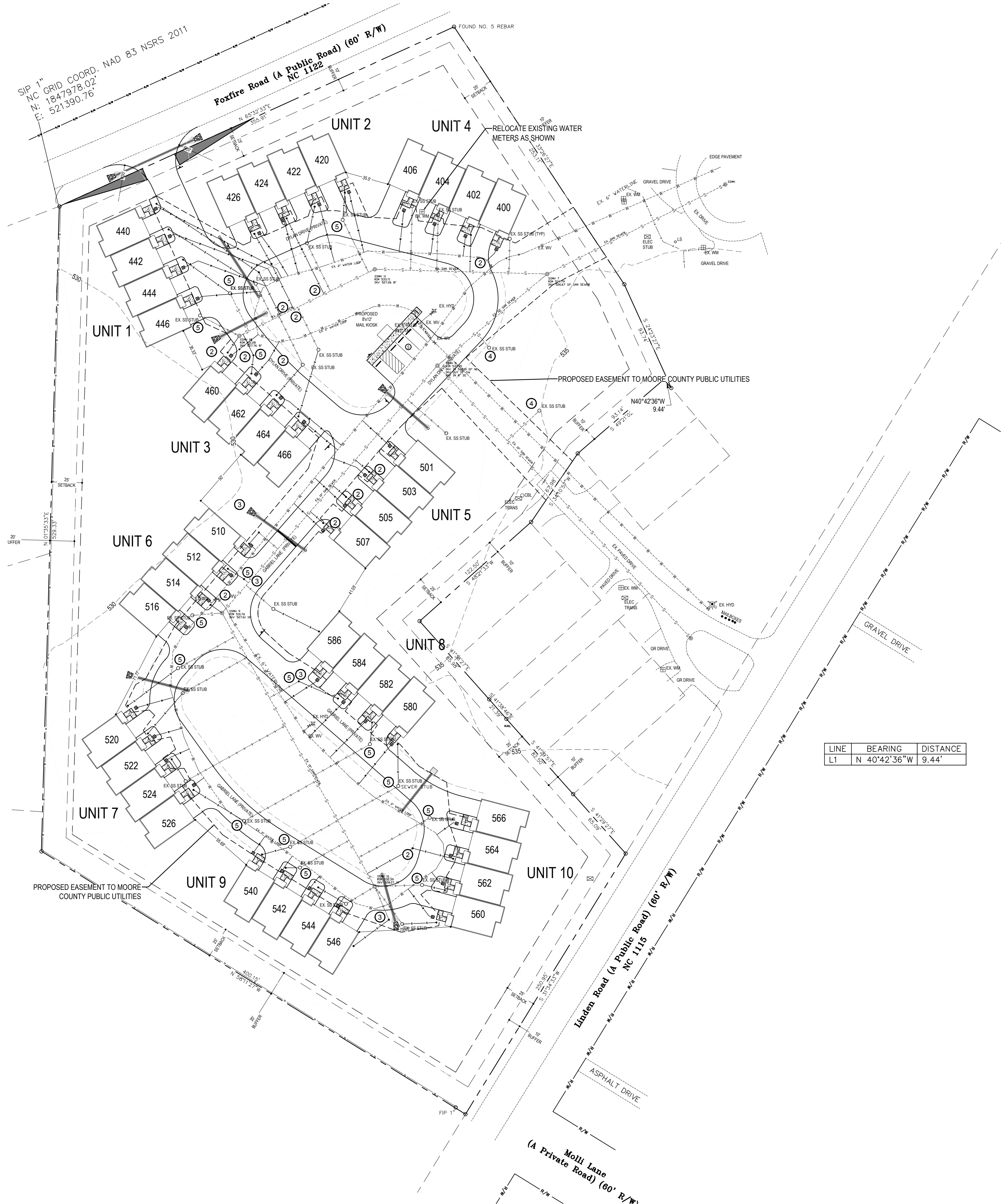
Moore Co. Public Utilities _____

INFRASTRUCTURE INSPECTION NOTICE TO CONTRACTOR

This is to advise you that the Village of Pinehurst is now requiring a **minimum** of Forty-eight (48) hours of notice when requesting an Engineering Inspection. Inspection requests may be made by calling the Public Services Department at 295-5021. **Items requiring an Engineering Inspection include, but are not limited to:**

1. Subgrade inspection/proof rolling (streets, sidewalks, firelanes, etc.) Density tests from an approved geotechnical engineering firm may be required.
2. Placement and inspection of base course materials including proof-rolling. Density tests from a Village approved geotechnical engineering firm may be required/accepted by the Village.
3. Placement and compaction of pavement materials including concrete and asphalt surface courses. Includes stringlines/grade control, paving & rolling operations, material inspections.
4. Installation of water and sewer mains and services including pressure testing, pipe laying, chlorination of water mains, bacterial testing, mandrel pulls, etc. necessary to meet the Village's Utility ordinances. **NOTE:** The Contractor shall also contact Moore County Public Utilities Department Engineering Division at 947-6315 to schedule utility inspections as required by MCPUD.
5. Installation of formwork and placement of concrete (sidewalks, curb & gutter, etc.) within the public right of way.
6. Installation of storm drainage systems (pipes, trenches, catch basins, frames/grates, outlet protection, etc.)

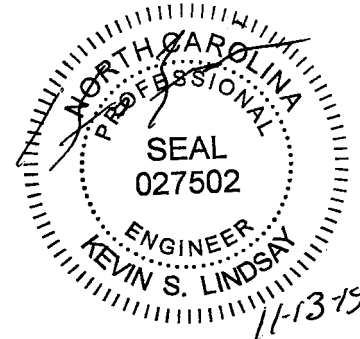
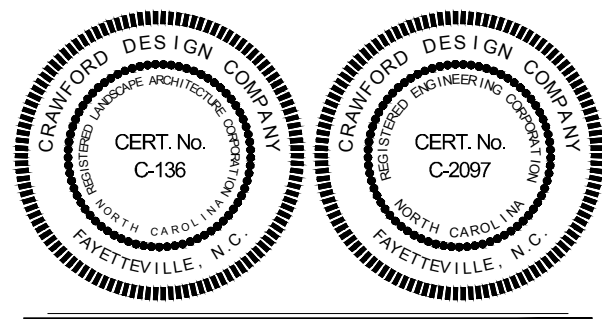
Failure to schedule the required inspections shall be grounds for rejection of all work not inspected and issuance of a stop-work order until the project is in compliance



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[CONSTRUCTION SET]

R & M COMMERCIAL REAL ESTATE, LLC

LA FORET

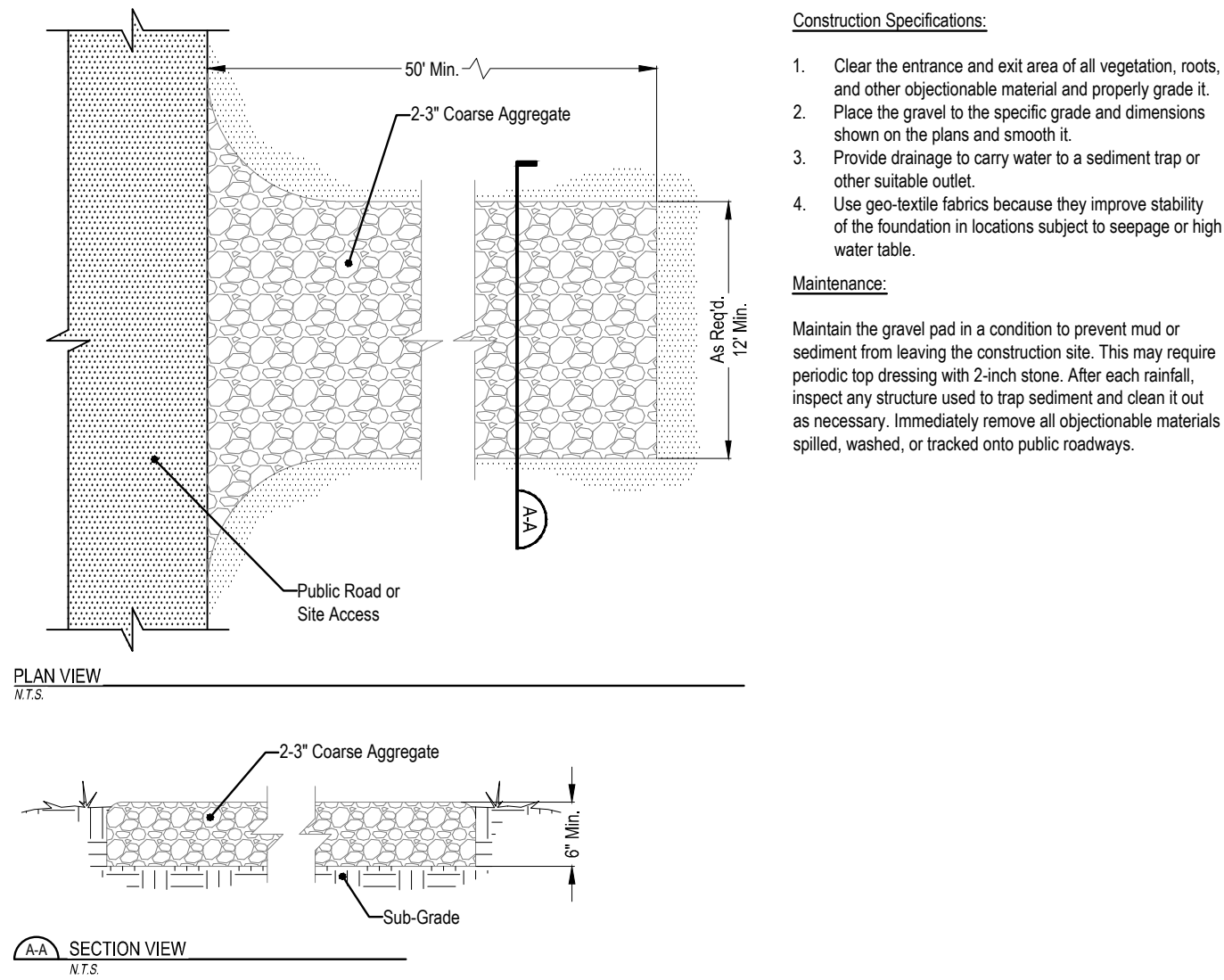
OVERALL UTILITIES PLAN

PROJECT DETAILS
Project Manager: KSL
CAD Technician: RFN/GER
Reviewed / Approved By:
Project Number: 18033

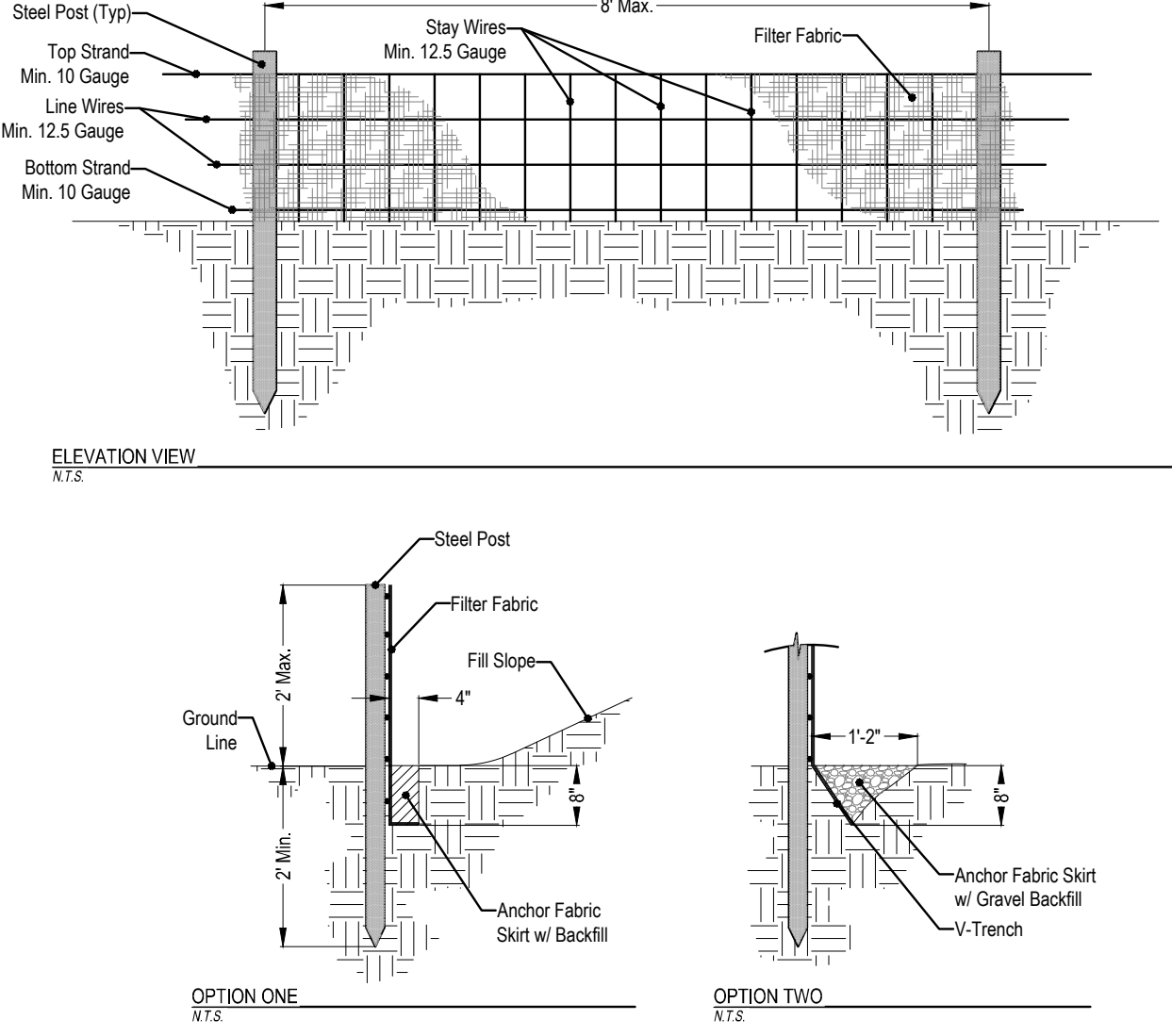
SCALE 0 50 100
Full Scale: Horiz.: 1" = 50'
Half Scale: Horiz.: 1" = 100'

ISSUE DATE 11/13/2019
SHEET NUMBER

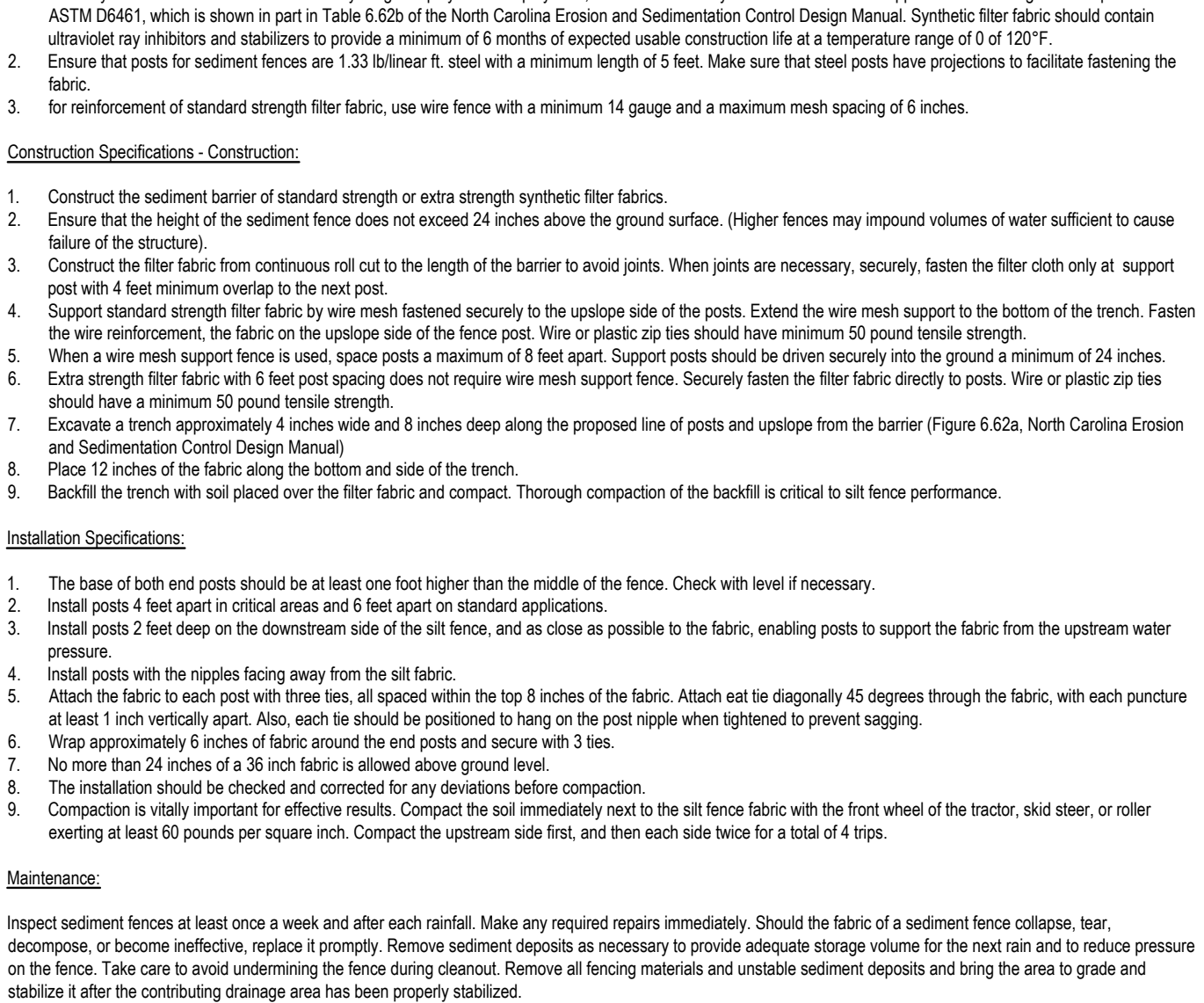
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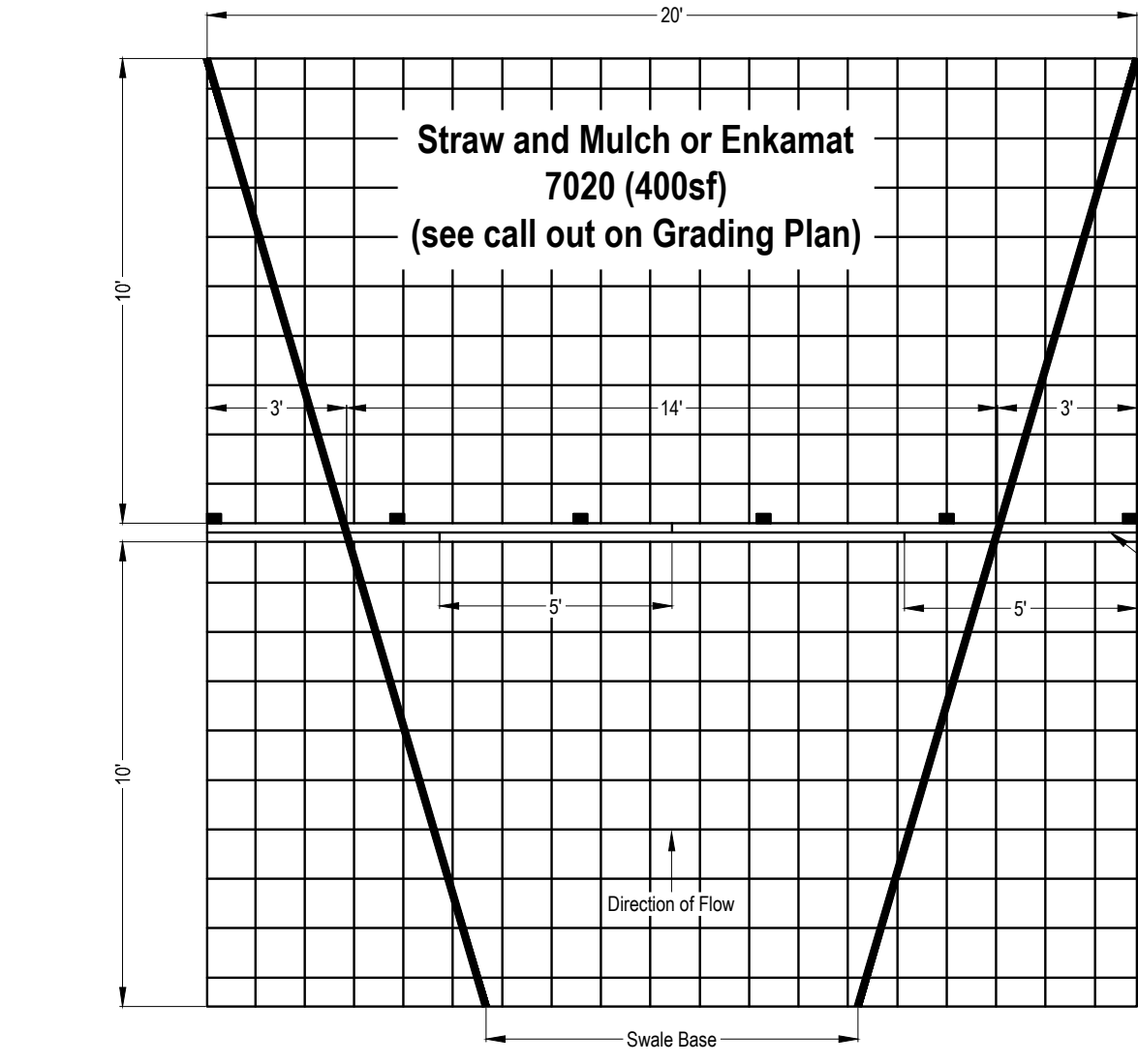
TEMPORARY GRAVEL CONSTRUCTION ENTRANCE



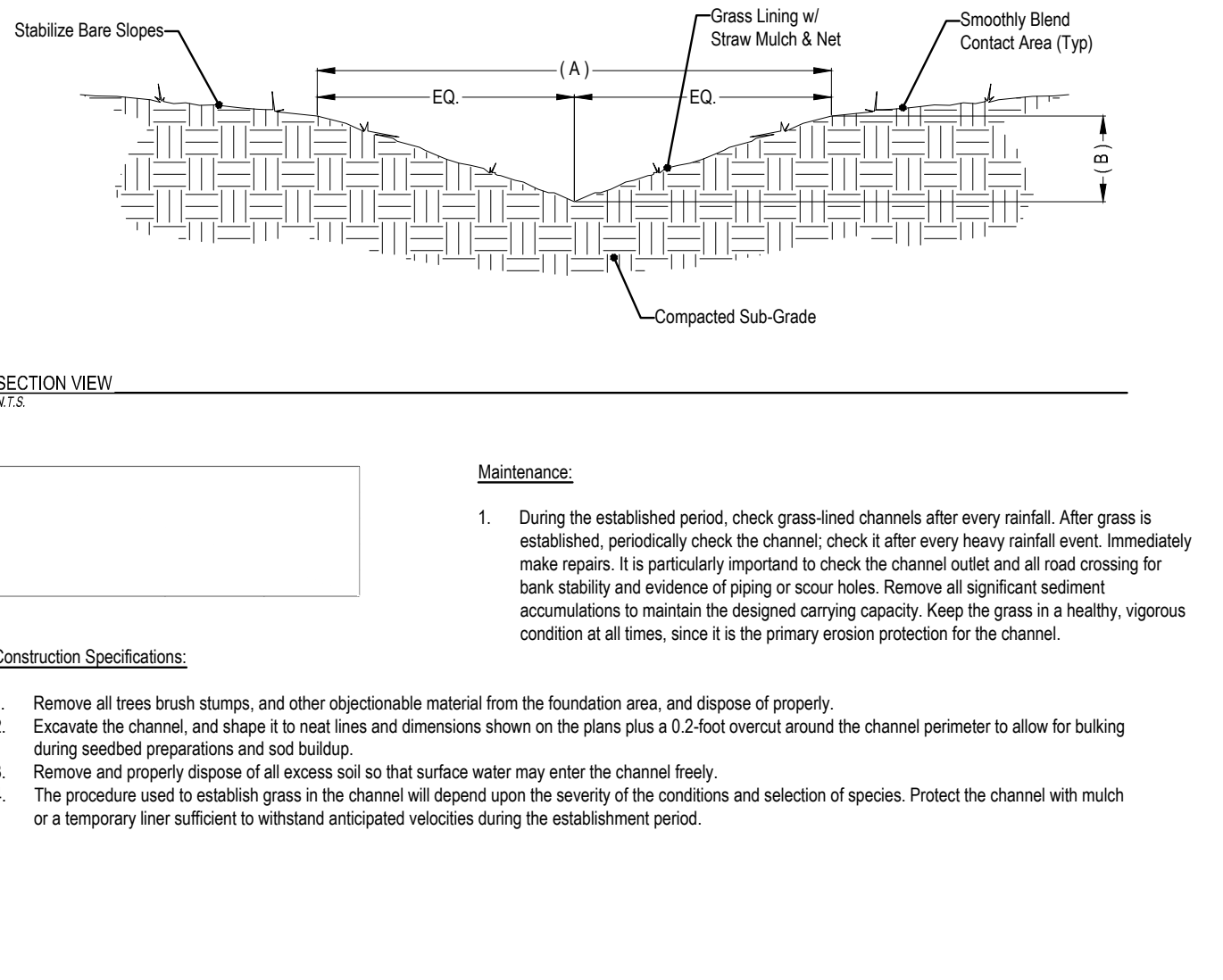
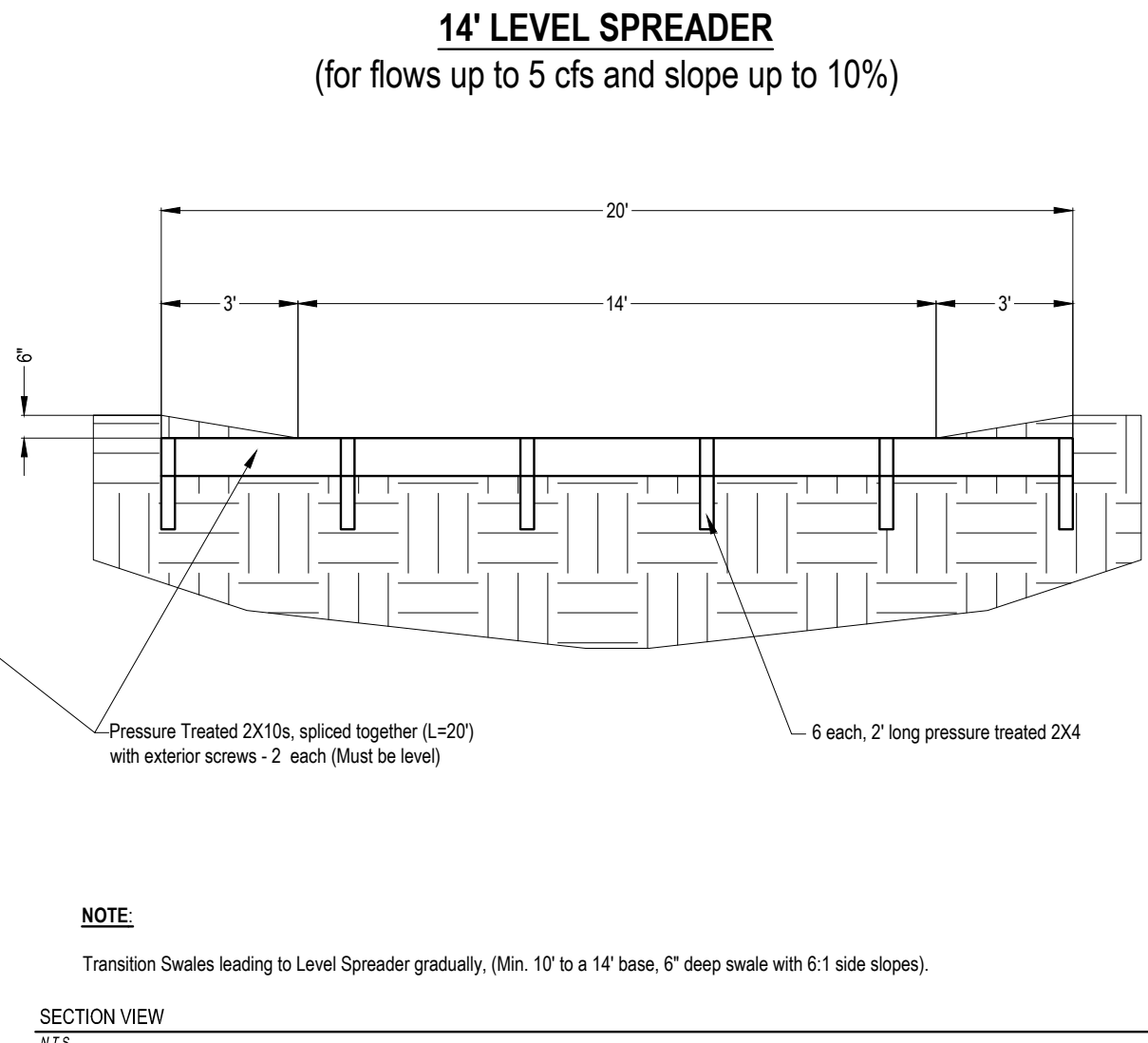
TEMPORARY SEDIMENT FENCE



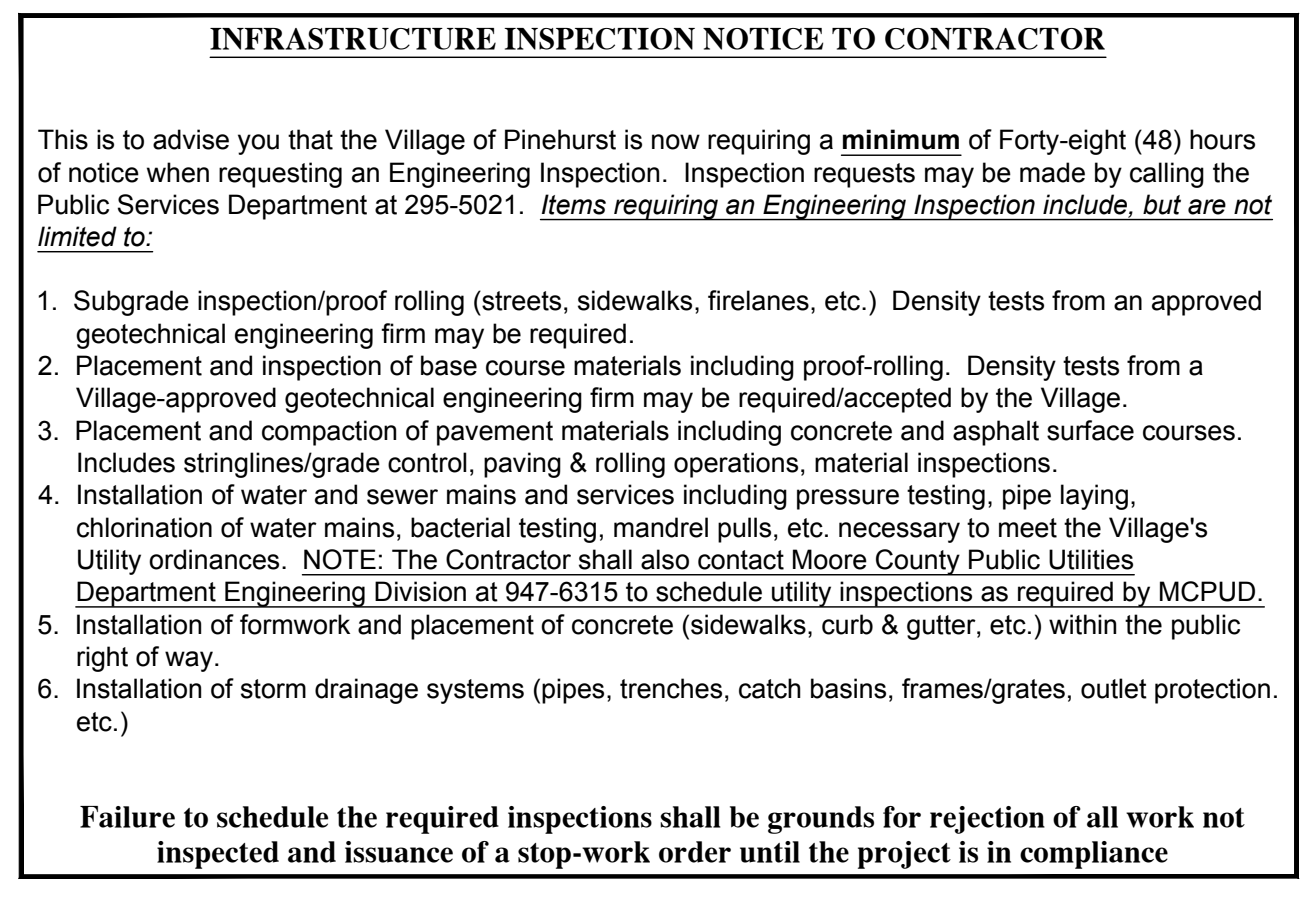
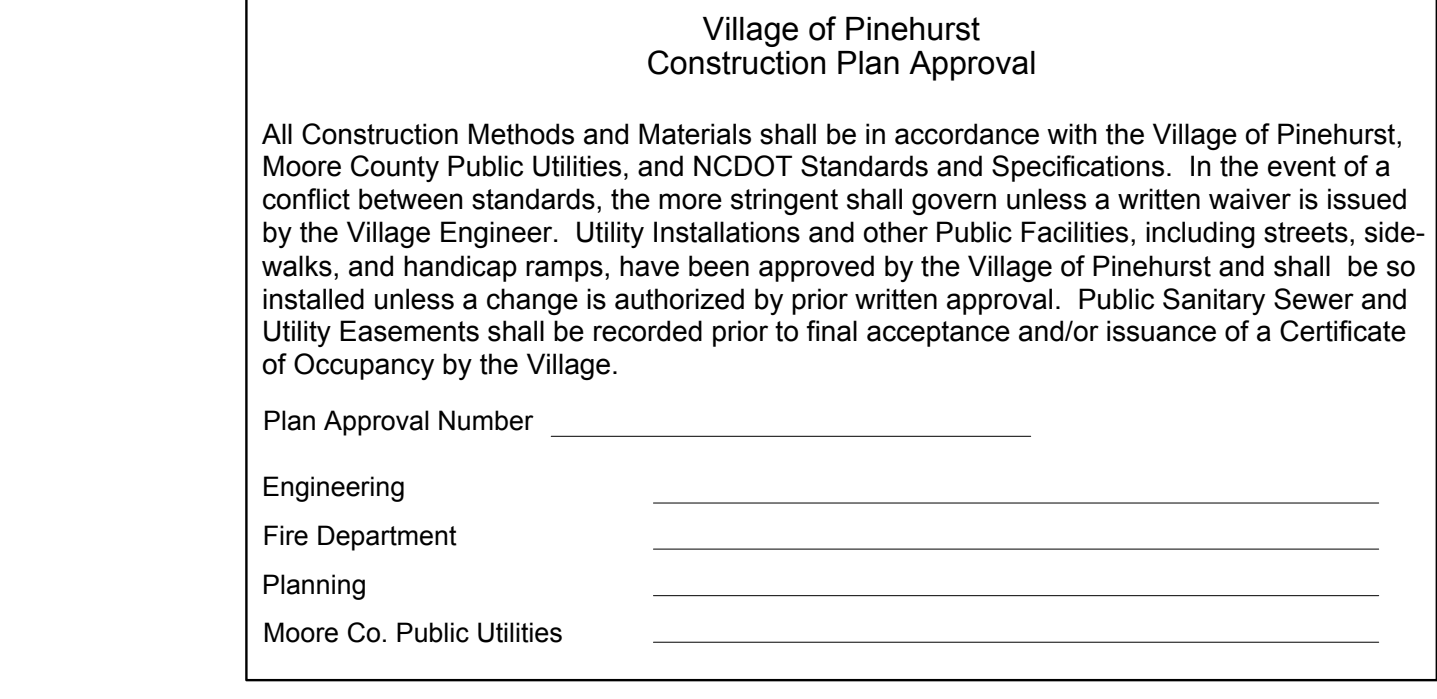
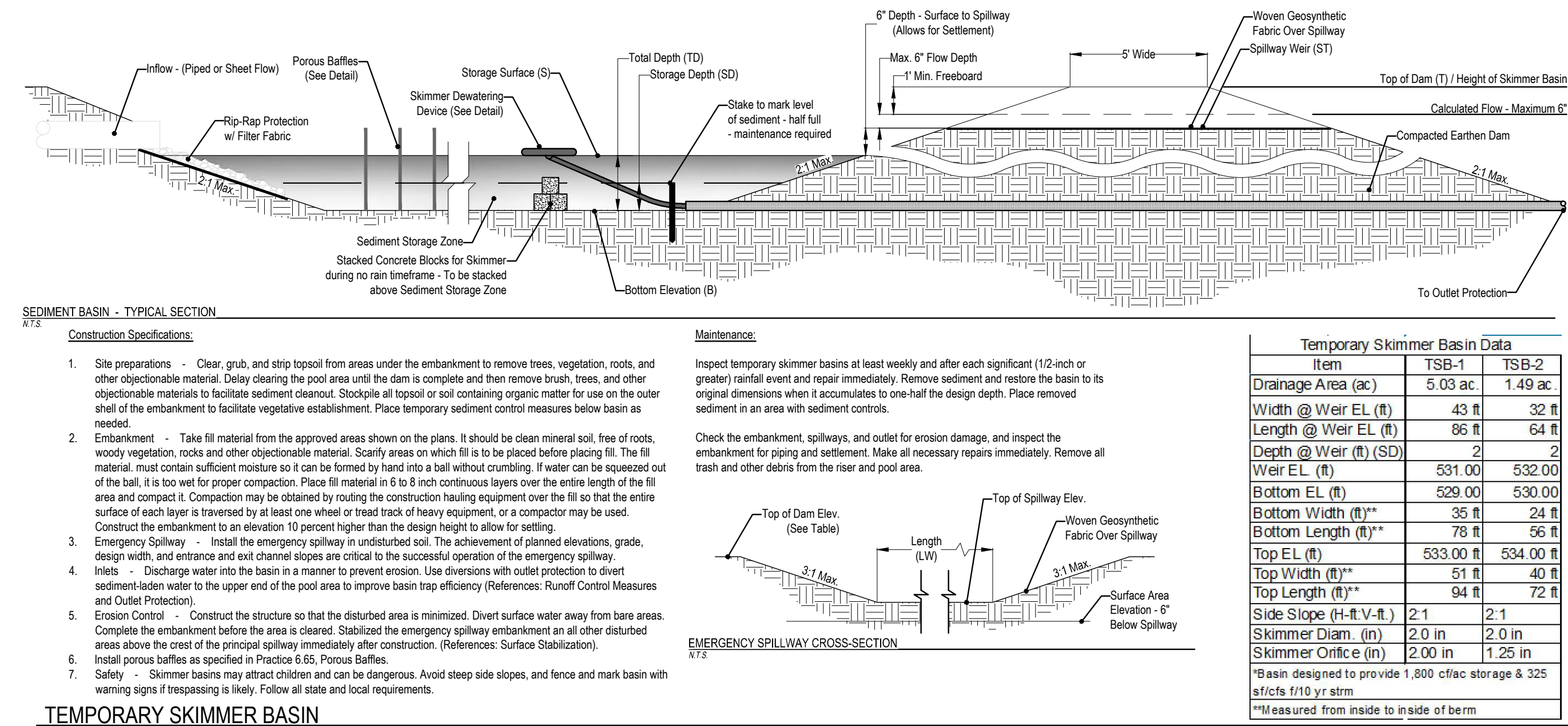
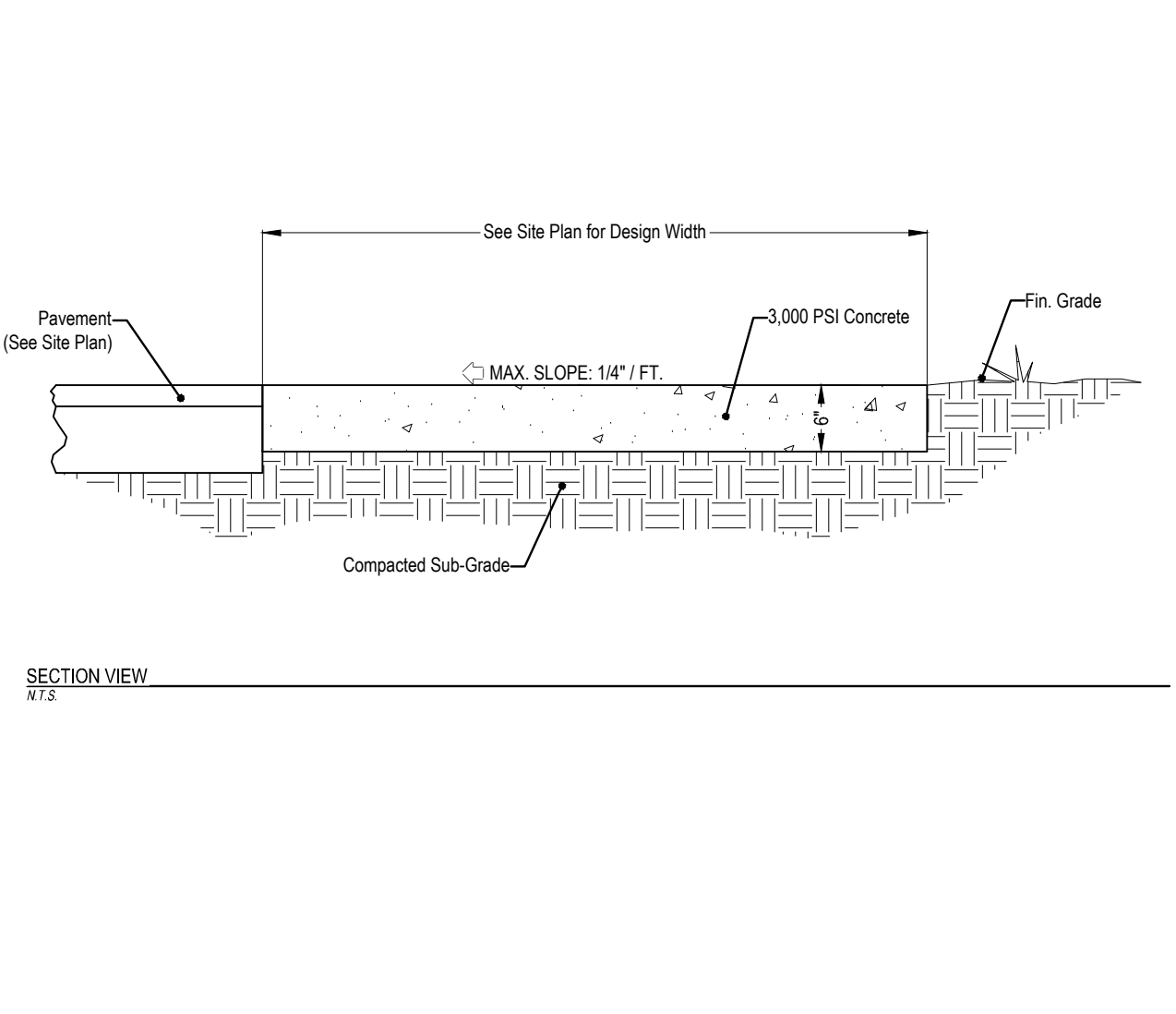
SEDIMENT FENCE w/ STRAW WATTLE OUTLET



14' LEVEL SPREADER (for flows up to 5 cfs and slopes up to 10%)



SWALE: V-SHAPED - GRASS LINED



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SOUTHERN PINES, N.C.

SEAL
027502
ENGINEER
KEVIN S. LINDSEY
11-13-19

[CONSTRUCTION SET]

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LA FORET

DETAILS

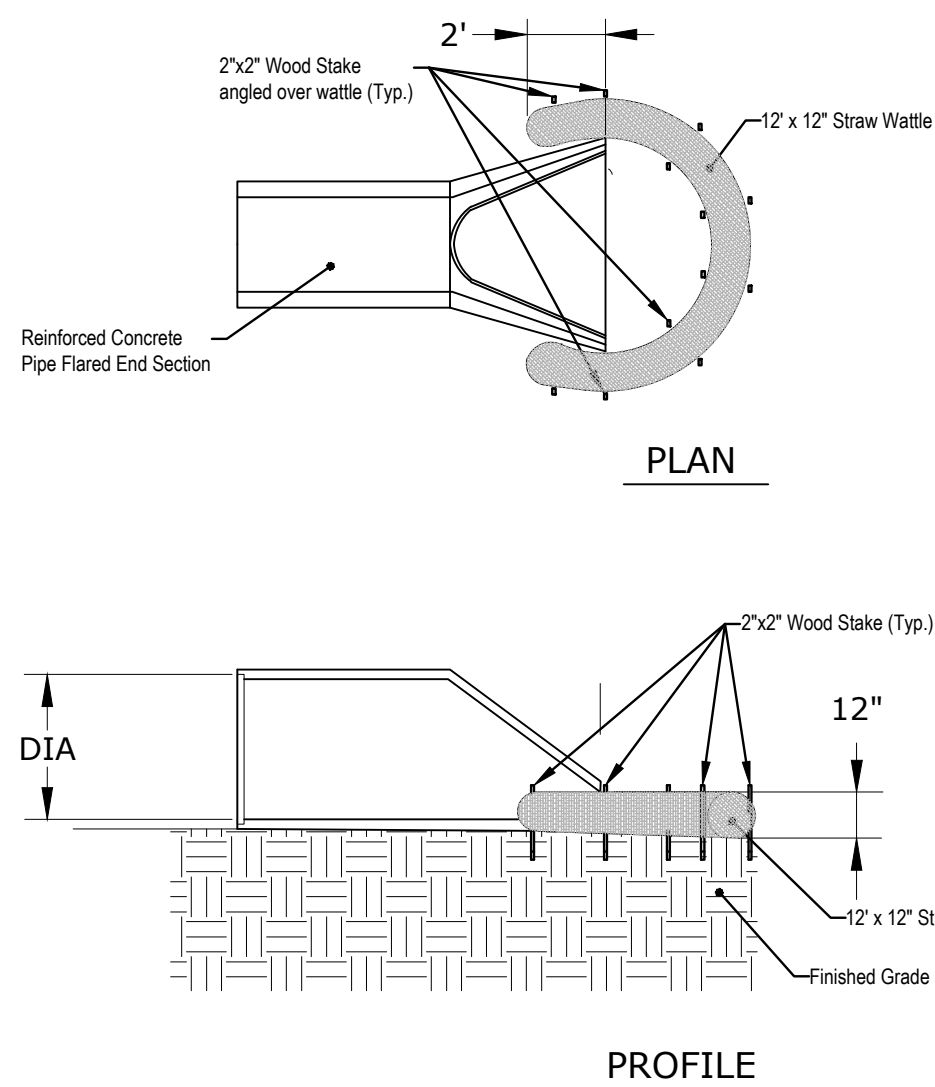
PROJECT DETAILS
Project Manager: KSL
CAD Technician: RENGIER
Reviewed / Approved By: 18033
Project Number: 18033

SCALE

ISSUE DATE 11/13/2019

SHEET NUMBER

C5.0

**STRAW WATTLE CULVERT INLET PROTECTION**

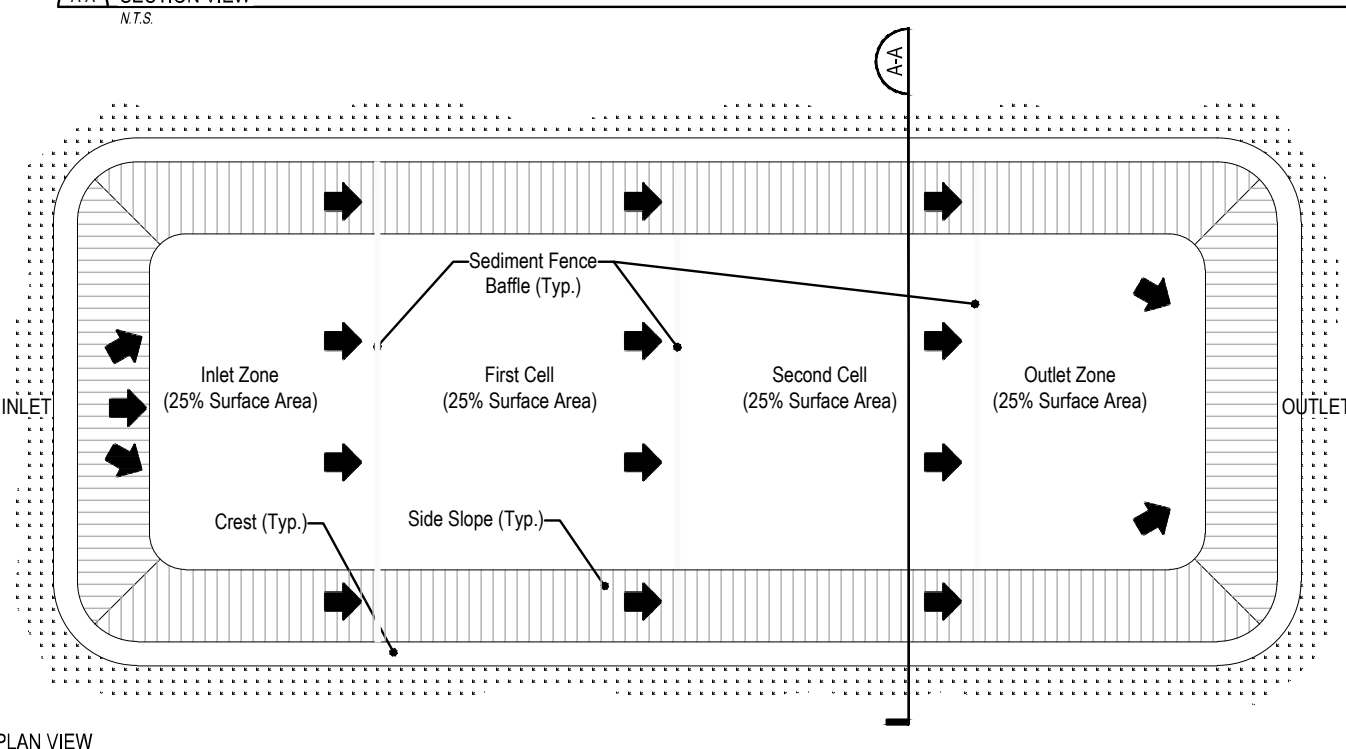
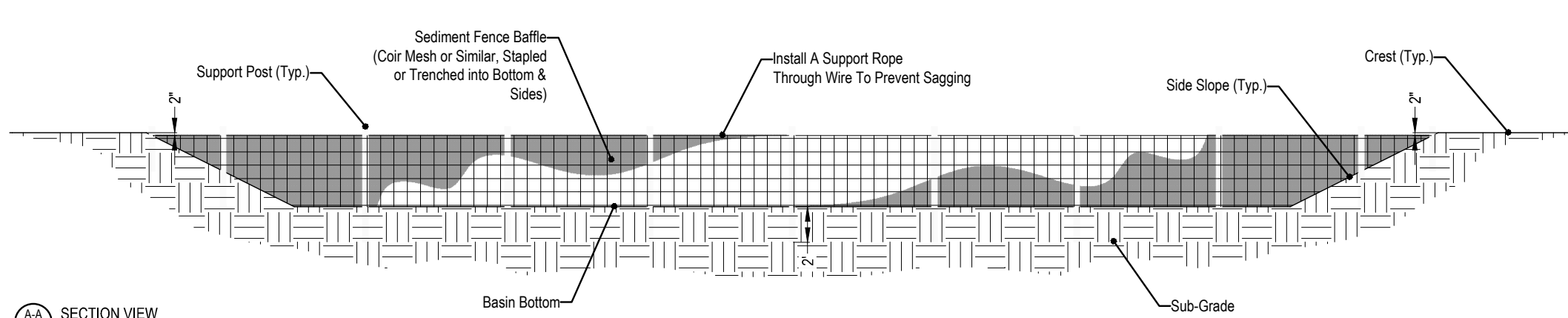
NOT TO SCALE

Construction Notes:

1. Use a minimum 12" diameter wattle with a minimum length of 12 ft.
2. Excavate a 1" to 2" trench for wattle to be placed.
3. Use 2" x 2" x 2 ft. long wooden stakes. Install a minimum of 12 stakes at an angle to wedge the wattle to the ground.
4. Provide staples made of 0.125" diameter steel wire formed into a "U" shape and not less than 12" length. Install staples approximately every 12" on both sides of wattle and at each end to secure it to the soil.

Maintenance Notes:

1. Inspect Wattles and Stakes at least weekly and after each significant (1/2" or greater) rainfall event.
2. Clear the device of any debris or other objects to provide adequate flow for subsequent rains.
3. Take care not to damage or undercut the wattle during sediment removal.
4. Replace wattle as needed.

**POROUS BAFFLES (1 of 2)**

NOT TO SCALE

Construction Specifications:

1. Grade the basin so that the bottom is level front to back and side to side.
2. Install posts across the width of the sediment trap (See Practice 6.02, Sediment Fence, Erosion & Sedimentation Control Planning & Design Manual).
3. Steel posts shall be driven a minimum depth of 24 inches, spaced a maximum of 4-ft apart, and installed up the sides of the basin as well. The top of the fabric should be 6-inches high than the invert of the spillway. Tops of baffles should be 2-inches lower than the top of the berms.
4. Install at least three rows of baffles between the inlet and outlet discharge point. Basins less than 20-ft in length may use two baffles.
5. Add a support wire or rope across the top of the measure to prevent sagging.
6. Wrap porous material, (700g/m² coir erosion blanket (Figure 6.05) or equal) over top wire. The fabric should have five to ten percent openings in the weave. Attach fabric to a rope and a support structure with zip ties, wire, or staples.
7. The bottom and sides of the fabric shall be anchored in a trench or pinned with 8-inches erosion control matting staples.
8. Do not splice the fabric, but use a continuous piece across the basin.

Maintenance:

1. Inspect baffles at least once a week and after each rainfall. Make any required repairs immediately.
2. Be sure to maintain access to the baffles. Should the fabric of a baffle collapse, tear, decompose, or become ineffective, replace it promptly.
3. Remove sediment deposits when it reaches half full to provide adequate storage volume for the next rain and to reduce pressure on the baffles. Take care to avoid damaging the baffles during cleanout. Sediment depth should never exceed half the designed storage depth.
4. After the contributing drainage area has been properly stabilized, remove all baffle materials and unstable sediment deposits, bring area to grade and stabilize with ground cover per specifications.

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6. Installation of storm drainage systems (pipes, trenches, catch basins, frames/grates, outlet protection, etc.)

Failure to schedule the required inspections shall be grounds for rejection of all work not inspected and issuance of a stop-work order until the project is in compliance

**Village of Pinehurst
Construction Plan Approval**

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Plan Approval Number _____

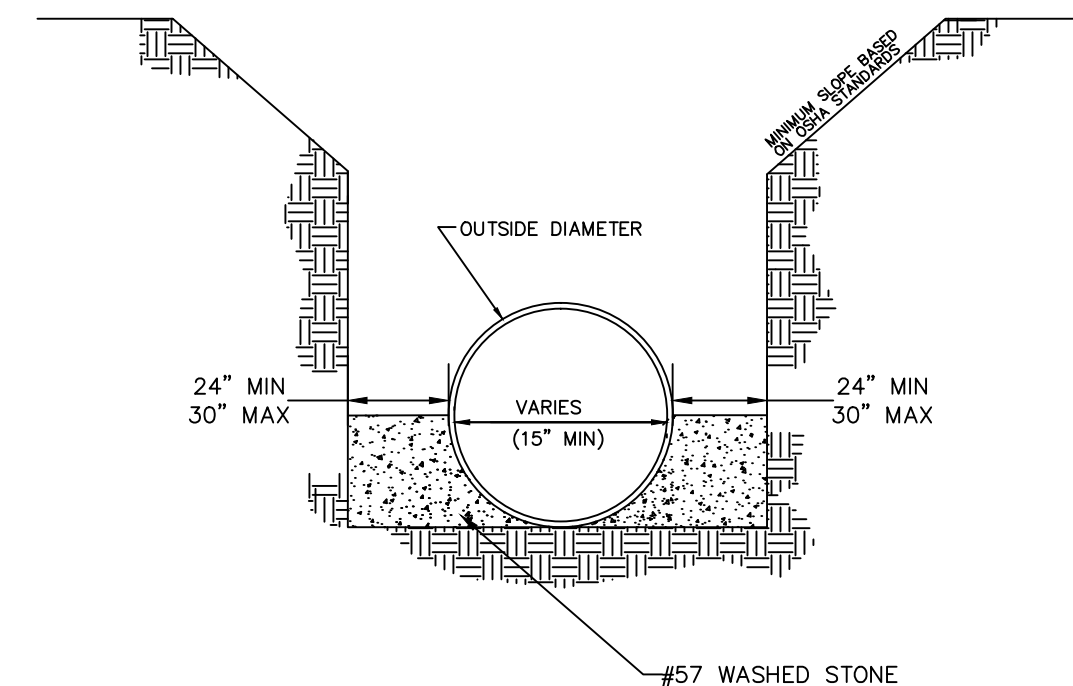
Engineering _____
Fire Department _____
Planning _____
Moore Co. Public Utilities _____

EASEMENT REQUIREMENTS FOR OPEN STORM DRAINAGE CHANNELS	
AREA IN ACREAGE	EASEMENT REQUIREMENT
0-45 AC.	20'
	20'
	20'
45-120 AC.	30'
120-500 AC.	40'
500 AC.+	(SEE NOTE)

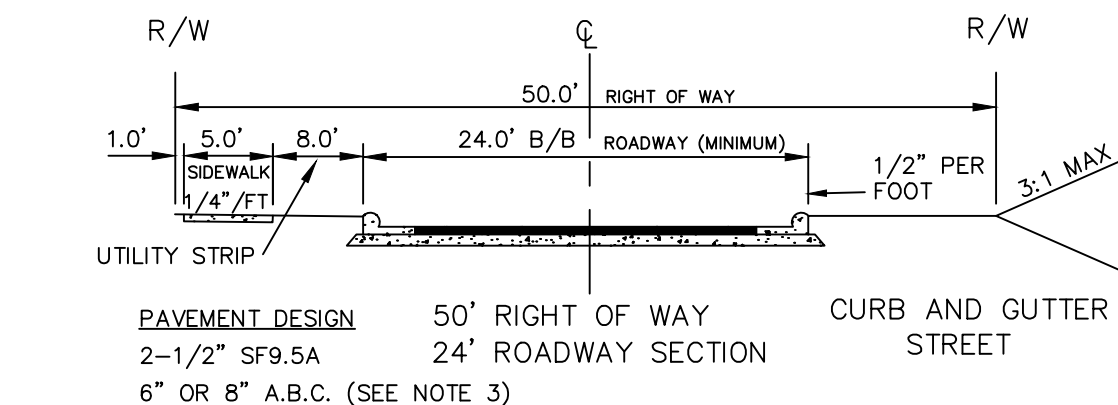
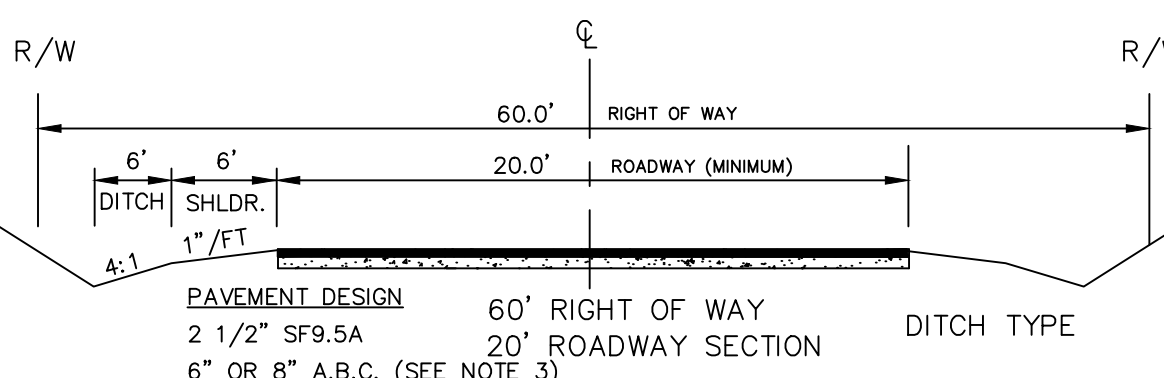
EASEMENT REQUIREMENTS FOR STORM DRAIN PIPE	
PIPE SIZE	EASEMENT REQUIREMENT
15"	20'
18"	20'
24"	20'
30"	20'
36"	20'
42"	25'
48"	30'
54"+	30'/MIN (VARIES)

NOTES:

1. FOR STREAMS CARRYING 500 ACRES OR MORE OF SURFACE RUNOFF, THE EASEMENT REQUIREMENT IS TO BE THE WIDTH OF THE STREAM FROM TOP OF BANK TO TOP OF BANK, PLUS (+) 10' ON EACH SIDE OF STREAM. (40' MINIMUM WIDTH)
2. FOR OPEN CHANNELS, THE MINIMUM EASEMENT MUST CONTAIN THE WIDTH OF THE STREAM FROM TOP OF BANK TO TOP BANK.

**NOTES:**

1. A MINIMUM OF 24" FROM OUTSIDE DIAMETER OF PIPE TO SIDE OF TRENCH MUST BE ALLOWED FOR COMPACTION OF FILL MATERIAL. BACKFILLING OF TRENCHES SHALL BE ACCOMPLISHED IMMEDIATELY AFTER THE PIPE IS LAID. THE FILL AROUND THE PIPE SHALL BE PLACED IN LAYERS NOT TO EXCEED 6". UNDER NO CIRCUMSTANCES SHALL WATER BE PERMITTED TO RISE IN UNBACKFILLED TRENCHES AFTER THE PIPE HAS BEEN PLACED. COMPACTION REQUIREMENTS SHALL BE ATTAINED BY THE USE OF THE MECHANICAL TAMPS ONLY. EACH AND EVERY LAYER OF BACKFILL SHALL BE PLACED LOOSE AND THOROUGHLY COMPACTED INTO PLACE.
2. ALL BACKFILL MATERIAL SHALL HAVE AN IN PLACE COMPACTED DENSITY OF 95% OF STANDARD PROCTOR. THE FINAL 2' BELOW FINISHED GRADE SHALL BE 100%.
3. ALL TRENCHING OPERATIONS SHALL MEET OSHA STANDARDS.
4. BACKFILL MATERIAL BENEATH ROADWAY SHALL BE SELECT BACKFILL MATERIAL.
5. HAUNCHING SHALL BE WITH #57 OR #67 WASHED STONE UNLESS OTHERWISE APPROVED BY THE VILLAGE ENGINEER.

**NOTES:**

1. NORMAL CROWN OF 1/4" PER FOOT UNLESS OTHERWISE DIRECTED BY VILLAGE ENGINEER.
2. THE VILLAGE COUNCIL MAY WAIVE THE REQUIREMENT FOR CURB AND GUTTER IN AREAS OUTSIDE OF "OLD TOWN" (HISTORIC PRESERVATION OVERLAY DISTRICT). PROPER DRAINAGE MEASURES SHALL BE INCORPORATED INTO THE ROADWAY DESIGN IN THESE AREAS AND APPROVED BY THE VILLAGE.
3. THE MINIMUM PAVEMENT SECTION FOR LOCAL AND CUL-DE-SAC PUBLIC AND PRIVATE STREETS SHALL BE 6" ABC. ALL OTHERS SHALL HAVE 8" MINIMUM ABC.

TABLE 1.
CLEAR ZONE DISTANCES
LOCAL, COLLECTOR, AND COMMERCIAL STREETS

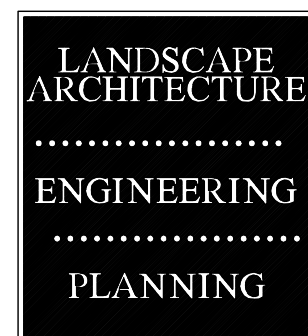
DESIGN ADT	CLEAR ZONE FROM EDGE OF PAVEMENT	
	TANGENT SECTION	CURVE (WITHIN 125' OF CULVERT)
UNDER 750	10'	15'
750 - 1500	12'	18'
1501 - 6000	14'	21'
OVER 6000	16'	24'

REV	DESCRIPTION	DATE	APPROVED BY	MINIMUM DRAINAGE EASEMENT REQUIREMENTS FOR STORM DRAIN PIPES AND OPEN CHANNELS	
		12/15	MSA		
NOT TO SCALE DWG NO. 5.10 SHEET 1 OF 1					

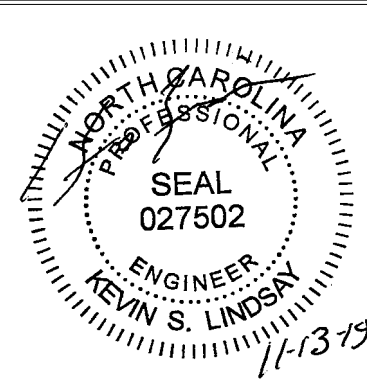
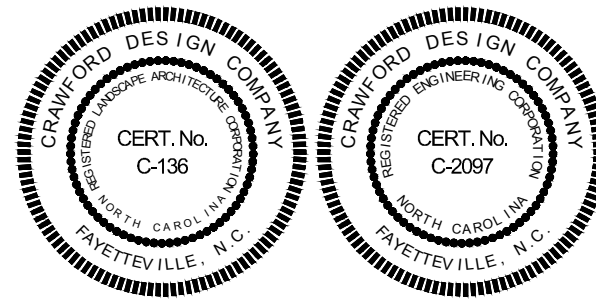
REV	DESCRIPTION	DATE	APPROVED BY	TRENCH DETAIL FOR STORM DRAIN PIPES	
		12/15	MSA		
NOT TO SCALE DWG NO. 5.08 SHEET 1 OF 1					

REV	DESCRIPTION	DATE	APPROVED BY	TYPICAL SECTIONS LOCAL RESIDENTIAL STREETS	
		12/15	MSA		
NOT TO SCALE DWG NO. 3.01 SHEET 1 OF 1					

REV	DESCRIPTION	DATE	APPROVED BY	CULVERT CROSSINGS AT RESIDENTIAL AND COMMERCIAL STREETS	
		12/15	MSA		
NOT TO SCALE DWG NO. 5.06-B SHEET 2 OF 2					



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[CONSTRUCTION SET]

R & M COMMERCIAL REAL ESTATE, LLC

LA FORET

DETAILS

PROJECT DETAILS
Project Manager: KSL
CAD Technician: RFN/GER
Reviewed / Approved By:
Project Number: 18033

SCALE

ISSUE DATE 11/13/2019

SHEET NUMBER

C5.1

THE FOLLOWING WAS TAKEN FROM THE STATE OF NORTH CAROLINA'S EROSION AND SEDIMENT CONTROL PLANNING AND DESIGN MANUAL			
TABLE 6.10a TEMPORARY SEEDING RECOMMENDATIONS FOR LATE WINTER & EARLY SPRING			
<u>SEEDING MIXTURE:</u>			
SPECIES :	RYE (grain)	ANNUAL LESPEDEZA (KOBE IN PIEDMONT AND COASTAL PLAIN, KOREAN MOUNTAINS)	
IN	RATE :	120 lb/acre	50 lb/acre
			*OMIT ANNUAL LESPEDEZA WHEN DURATION OF TEMPORARY COVER IS NOT TO EXTEND BEYOND JUNE.
<u>SEEDING DATES:</u>			
MOUNTAINS:	ABOVE 2500 FT: FEB. 15 - MAY. 15		
	BELOW 2500 FT: FEB 1 - MAY 1		
PIEDMONT:	JAN. 1 - MAY, 1		
COASTAL PLAIN:	DEC. 1 - APR. 15		
<u>SOIL AMENDMENTS:</u>			
FOLLOW SOIL TESTS OR APPLY 2,000 lb/acre GROUND AGRICULTURAL LIMESTONE AND 750 lb/acre 10-10-10 FERTILIZER			
<u>MULCH:</u>			
APPLY 4,000 lb/acre STRAW. ANCHOR STRAW BY TACKING WITH ASPHALT. NETTING OR A MULCH ANCHORING TOOL. A DISK WITH BLADES SET NEARLY STRAIGHT CAN BE USED AS A MULCH ANCHORING TOOL.			
<u>MAINTENANCE:</u>			
REFERTILIZE IF GROWTH IS NOT FULLY ADEQUATE. RESEED, REFERTILIZE AND MULCH IMMEDIATELY FOLLOWING EROSION OR OTHER DAMAGE.			

THE FOLLOWING WAS TAKEN FROM THE STATE OF NORTH CAROLINA'S EROSION AND SEDIMENT CONTROL PLANNING AND DESIGN MANUAL

TABLE 6.10b
TEMPORARY SEEDING RECOMMENDATIONS FOR SUMMER

SEEDING MIXTURE:

SPECIES :	GERMAN MILLET
RATE :	40 lb/acre

SEEDING DATES:

MOUNTAINS:	MAY, 15 - AUG, 15
PIEDMONT:	MAY, 1 - AUG, 15
COASTAL PLAIN:	APR. 15 - AUG, 15

SOIL AMENDMENTS:

FOLLOW RECOMMENDATIONS OF SOIL TESTS OR APPLY 2,000 lb/acre GROUND AGRICULTURAL LIMESTONE AND 750 lb/acre 10-10-10 FERTILIZER.

MULCH:

APPLY 4,000 lb/acre STRAW. ANCHOR STRAW BY TACKING WITH ASPHALT, NETTING OR A MULCH ANCHORING TOOL. A DISK WITH BLADES SET NEARLY STRAIGHT CAN BE USED AS A MULCH ANCHORING TOOL.

MAINTENANCE:

REFERTILIZE IF GROWTH IS NOT FULLY ADEQUATE. RESEED, REFERTILIZE AND MULCH IMMEDIATELY FOLLOWING EROSION OR OTHER DAMAGE.

THE FOLLOWING WAS TAKEN FROM THE STATE OF NORTH CAROLINA'S *EROSION AND SEDIMENT CONTROL PLANNING AND DESIGN MANUAL*

TABLE 6.10c
TEMPORARY SEEDING RECOMMENDATIONS FOR FALL

SEEDING MIXTURE:
SPECIES : RYE (grain)
RATE 120 lb/acre

SEEDING DATES:
MOUNTAINS: AUG. 15 - DEC. 15
COASTAL PLAIN AND PIEDMONT: AUG. 15 - DEC. 30

SOIL AMENDMENTS:
FOLLOW SOIL TESTS OR APPLY 2,000 lb/acre GROUND AGRICULTURAL LIMESTONE AND 1,000 lb/acre 10-10-10 FERTILIZER.

MULCH:
APPLY 4,000 lb/acre STRAW. ANCHOR STRAW BY TACKING WITH ASPHALT, NETTING OR A MULCH ANCHORING TOOL. A DISK WITH BLADES SET NEARLY STRAIGHT CAN BE USED AS A MULCH ANCHORING TOOL.

MAINTENANCE:
REPAIR AND REFERTILIZE DAMAGED AREAS IMMEDIATELY. TOPDRESS WITH 50 lb/acre OR NITROGEN IN MARCH. IF IT IS NECESSARY TO EXTEND TEMPORARY COVER BEYOND JUNE 15, OVERSEED WITH 50 lb/acre KOBE (PIEDMONT AND COASTAL PLAIN) OR KOREAN (MOUNTAINS) LESPEDEZA IN LATE FEBRUARY OR EARLY MARCH.

INFRASTRUCTURE INSPECTION NOTICE TO CONTRACTOR

This is to advise you that the Village of Pinehurst is now requiring a **minimum** of Forty-eight (48) hours of notice when requesting an Engineering Inspection. Inspection requests may be made by calling the Public Services Department at 295-5021. *Items requiring an Engineering Inspection include, but are not limited to:*

1. Subgrade inspection/proof rolling (streets, sidewalks, firelanes, etc.) Density tests from an approved geotechnical engineering firm may be required.
2. Placement and inspection of base course materials including proof-rolling. Density tests from a Village-approved geotechnical engineering firm may be required/accepted by the Village.
3. Placement and compaction of pavement materials including concrete and asphalt surface courses. Includes stringlines/grade control, paving & rolling operations, material inspections.
4. Installation of water and sewer mains and services including pressure testing, pipe laying, chlorination of water mains, bacterial testing, mandrel pulls, etc. necessary to meet the Village's Utility ordinances. **NOTE: The Contractor shall also contact Moore County Public Utilities Department Engineering Division at 947-6315 to schedule utility inspections as required by MCPUD.**
5. Installation of formwork and placement of concrete (sidewalks, curb & gutter, etc.) within the public right of way.
6. Installation of storm drainage systems (pipes, trenches, catch basins, frames/grates, outlet protection, etc.)

Failure to schedule the required inspections shall be grounds for rejection of all work not inspected and issuance of a stop-work order until the project is in compliance

TEMPORARY SEEDING SPECIFICATION - LATE WINTER & EARLY SPRING

THE FOLLOWING WAS TAKEN FROM THE STATE OF NORTH CAROLINA'S <i>EROSION AND SEDIMENT CONTROL PLANNING AND DESIGN MANUAL</i>		
TABLE 6.11v SEEDING No. 7CP FOR : GRASS-LINED CHANNELS; COASTAL PLAIN, LOWER PIEDMONT, AND DRY SOILS IN THE CENTRAL PIEDMONT		
<u>SEEDING MIXTURE:</u>	SPECIES: COMMON BERMUDAGRASS	RATE (lb/acre): 40-80 (1-2 lb/1,000 sf)
<u>SEEDING DATES:</u>		
1.	COASTAL PLAIN: APR. - JULY	
2.	PIEDMONT: APR. 15 - JUNE 30	
<u>SOIL AMENDMENTS:</u>		
APPLY LIME AND FERTILIZER ACCORDING TO SOIL TESTS, OR APPLY 3,000 lb/acre GROUND AGRICULTURAL LIMESTONE AND 500 lb/acre 10-10-10- FERTILIZER.		
<u>MULCH:</u>		
USE JUTE, EXCELSIOR MATTING, OR OTHER EFFECTIVE CHANNEL LINING MATERIAL TO COVER THE BOTTOM OF CHANNELS AND DITCHES. THE LINING SHOULD EXTEND ABOVE THE HIGHEST CALCULATED DEPTH OF FLOW ON CHANNEL SIDE SLOPES ABOVE THIS HEIGHT, AND IN DRAINAGES NOT REQUIRING TEMPORARY LININGS. APPLY 4,000 lb/acre GRAIN STRAW AND ANCHOR STRAW BY STAPLING NETTING OVER THE TOP.		
MULCH AND ANCHORING MATERIALS MUST NOT BE ALLOWED TO WASH DOWN SLOPES WHERE THEY CAN CLOG DRAINAGE DEVICES.		
<u>MAINTENANCE:</u>		
A MINIMUM OF 3 WEEKS IS REQUIRED FOR ESTABLISHMENT. INSPECT AND REPAIR MULCH FREQUENTLY. REFERTILIZE THE FOLLOWING APR. WITH 50 lb/acre NITROGEN.		

TEMPORARY SEEDING SPECIFICATION - SUMMER

PERMANENT SEEDING SPECIFICATION (APPLIES TO ALL DISTURBED AREAS THAT ARE NOT SODDED)			
SEEDING MIXTURE:		SPECIES: COMMON BERMUDA GRASS (HULLED)	
		RATE (lb/acre): 40-80 (1-2 lb/1,000 sf)	
SEEDING DATES:			
1.		COASTAL PLAIN: APR. - JULY	
2.		PIEDMONT: APR. 15 - JUNE 30	
SOIL AMENDMENTS:			
APPLY LIME AND FERTILIZER ACCORDING TO SOIL TESTS, OR APPLY 3,000 lb/acre GROUND AGRICULTURAL LIMESTONE AND 500 lb/acre 10-10-10- FERTILIZER.			
MULCH:			
USE JUTE, EXCELSIOR MATTING, OR OTHER EFFECTIVE CHANNEL LINING MATERIAL TO COVER THE BOTTOM OF CHANNELS AND DITCHES. THE LINING SHOULD EXTEND ABOVE THE HIGHEST CALCULATED DEPTH OF FLOW.			
ON SLOPES NOT REQUIRING TEMPORARY LININGS, APPLY 4,000 lb/acre GRAIN STRAW AND ANCHOR STRAW BY STAPLING NETTING OVER THE TOP.			
MULCH AND ANCHORING MATERIALS MUST NOT BE ALLOWED TO WASH DOWN SLOPES WHERE THEY CAN CLOG DRAINAGE DEVICES.			
MAINTENANCE:			
A MINIMUM OF 3 WEEKS IS REQUIRED FOR ESTABLISHMENT. INSPECT AND REPAIR MULCH FREQUENTLY. REFERTILIZE THE FOLLOWING APR. WITH 50 lb/acre NITROGEN.			

TEMPORARY SEEDING SPECIFICATION - FALL

THE FOLLOWING WAS TAKEN FROM THE STATE OF NORTH CAROLINA'S EROSION AND SEDIMENT CONTROL PLANNING AND DESIGN MANUAL			
TABLE 6.11v SEEDING No. 7CP FOR : GRASS-LINED CHANNELS; COASTAL PLAIN, LOWER PIEDMONT, AND DRY SOILS IN THE CENTRAL PIEDMONT			
SEEDING MIXTURE:	SPECIES: COMMON BERMUDAGRASS		
IN	RATE (lb/acre):	40-80 (1-2 lb/1,000 sf)	
SEEDING DATES:			
1.	COASTAL PLAIN: APR. - JULY		
2.	PIEDMONT: APR. 15 - JUNE 30		
SOIL AMENDMENTS:			
	APPLY LIME AND FERTILIZER ACCORDING TO SOIL TESTS, OR APPLY 3,000 lb/acre GROUND AGRICULTURAL LIMESTONE AND 500 lb/acre 10-10-10- FERTILIZER.		
MULCH:			
	USE JUTE, EXCELSIOR MATTING, OR OTHER EFFECTIVE CHANNEL LINING MATERIAL TO COVER THE BOTTOM OF CHANNELS AND DITCHES. THE LINING SHOULD EXTEND ABOVE THE HIGHEST CALCULATED DEPTH OF FLOW. ON SLOPES NOT REQUIRING TEMPORARY LININGS, APPLY 4,000 lb/acre GRAIN STRAW AND ANCHOR STRAW BY STAPLING NETTING OVER THE TOP. MULCH AND ANCHORING MATERIALS MUST NOT BE ALLOWED TO WASH DOWN SLOPES WHERE THEY CAN CLOG DRAINAGE DEVICES.		
MAINTENANCE:			
	A MINIMUM OF 3 WEEKS IS REQUIRED FOR ESTABLISHMENT. INSPECT AND REPAIR MULCH FREQUENTLY. REFERTILIZE THE FOLLOWING APR. WITH 50 lb/acre NITROGEN.		

PERMANENT SEEDING SPECIFICATION - 7CP

PLAN

1" MIN

B

W

L (10' MIN)

B

SECTION B-B

NATURAL GRADE

RIP-RAP

M

M=3 (MIN)

4" #57 WASHED STONE

LAYER OF FILTER FABRIC, GTF -150 OR EQUAL

NOTE: MINIMUM H=2/3 PIPE DIAMETER

NOTES:

1. CLASS OR MEDIAN SIZE OF RIP-RAP AND LENGTH, WIDTH AND DEPTH OF APRON TO BE DESIGNED BY THE ENGINEER.
2. NO BENDS OR CURVES IN THE HORIZONTAL ALIGNMENT OF THE APRON WILL BE PERMITTED.
3. RIP-RAP SHOULD EXTEND UP BOTH SIDES OF THE APRON AND AROUND THE END OF THE PIPE OR CULVERT AT THE DISCHARGE OUTLET AT A MAXIMUM SLOPE OF 3:1 AND A HEIGHT NOT LESS THAN TWO THIRDS THE PIPE DIAMETER OR CULVERT HEIGHT.
4. THERE SHALL BE NO OVERTFLOW FROM THE END OF THE APRON TO THE SURFACE OF THE RECEIVING CHANNEL. THE AREA TO BE PAVED OR RIP-RAPPED SHALL BE UNDERCUT SO THAT THE INVERT OF THE APRON SHALL BE AT THE SAME GRADE (FLUSH) WITH THE SURFACE OF THE RECEIVING CHANNEL. THE APRON SHALL HAVE A CUTOFF OR TOE WALL AT THE DOWNSTREAM END.
5. THE WIDTH OF THE END OF THE APRON SHALL BE EQUAL TO THE BOTTOM WIDTH OF THE RECEIVING CHANNEL. MAXIMUM TAPER TO RECEIVING CHANNEL 5:1.
6. ALL SUBGRADE FOR STRUCTURE TO BE COMPACTED TO 95% OR GREATER.
7. THE PLACING OF FILL, EITHER LOOSE OR COMPACTED IN THE RECEIVING CHANNEL SHALL NOT BE ALLOWED.

PERMANENT SEEDING SPECIFICATION - 7CP

SECTION A

ISOMETRIC PLAN VIEW

WHEEL STOP

NOT TO SCALE

AREA AROUND HANDLE SHALL BE COUNTER SUNK 1" AND HANDLE SHALL BE FREE TO MOVE UP AND DOWN

3/4" SMOOTH BAR

3/4" RADIUS

3" x 1/4" ROUND OR SQ. CUT WASHER

HEX NUT

(3" = 1')

6"

DETAIL OF HANDLE

PIPE SLEEVE
3" LONG

1"

#4 REBAR @ 6" ON CENTER EACH WAY

12"

4.5" MIN

12"

CONCRETE SLAB

CONCRETE SLAB WITH #4 @ 6" O.C E/W

COURSE

8"

VARIES

8"

OPENING

PIPE

4"

12"

3000 PSI CONCRETE

SECTION

6" (MIN.) WASHED STONE BEDDING

PLAN

35" MIN

35" MIN

12"

NOTES:

1. REBAR: SOLID CONCRETE BRICK, SOLID BLOCK, OR PRECAST CONCRETE MAY BE USED.
2. STANDARD STEPS REQUIRED @ 16" O.C.
3. USE MIN 3000 PSI CONCRETE MAX.
4. CONCRETE WALLS TO BE 6" THICK.
5. THROAT OPENING TO BE 5" MIN, 7" MAX.


Diagram illustrating a ditch installation cross-section. The ditch is shown in profile, with a 'MAIN' pipe at the bottom and a 'TAP' branching off. The tap is labeled 'TO BE MADE ON THE MAIN' and '3\"/>


Labels and components shown in the diagram:


- FINISH GRADE
- R/W LINE
- RELIEF BACKWATER PREVENTION DEVICE
- SIDEWALK
- CLENOUT
- MIN 4" WASHED STONE
- GLUE-ON CAP WITH 1-5 INP/LL
- WYE AND 1/3 BEND
- MINIMUM GRADE OF 1.0%
- COMPACTED SOIL
- 1/16 OR 1/8 PIPE BEND
- CURB & GUTTER
- 3" MIN.
- TO BE MADE ON THE MAIN
- SHOULDER SECTION

Notes:



1. TAP AMOUNT SHALL BE PLACED AT RIGHT-OF-WAY LINE.
2. DO NOT INSTALL CLENOUT INSIDE A SHOULDER SECTION.
3. SHOULDER SECTIONS, THE SERVICE SHALL BE A MINIMUM OF 30" BELOW THE LOW LINE OF THE DITCH.

REV	DESCRIPTION	DATE	APPROVED BY	RIP-RAP APRON AT CULVERTS	
△		12/15	MSA		
NOT TO SCALE	DWG NO. 5.07	SHEET 1 OF 1			

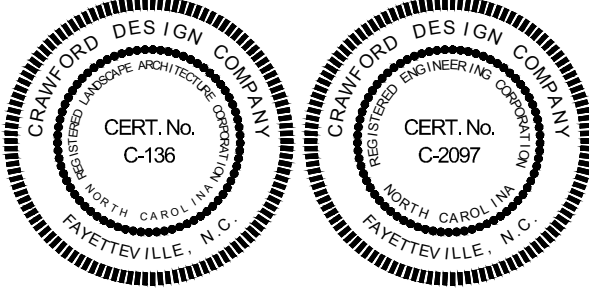
REV	DESCRIPTION	DATE	APPROVED BY	WHEEL STOP	
△		12/15	MSA		
NOT TO SCALE	DWG NO. 5.02-A	SHEET 1 OF 1			

REV	DESCRIPTION	DATE	APPROVED BY	STANDARD YARD INLET WITH CONCRETE SLAB LID	
△		12/15	MSA		
NOT TO SCALE	DWG NO. 5.01-A	SHEET 1 OF 1			

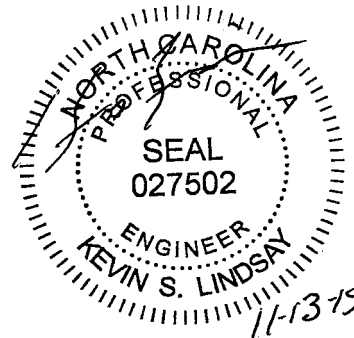
REVISED	MOORE COUNTY PUBLIC WORKS ENGINEERING DIVISION	SANITARY SEWER TAP	STD NO. SS-6
DATE DESCRIPTION			



Landscape Architecture ♦ Fayetteville, NC
Civil Engineering ♦ Southern Pines, NC
2302 W. Pennsylvania Ave. ♦ Southern Pines, NC 28387
Voice: 910-725-1107
www.crawfordsn.com



SEALS



[CONSTRUCTION SET]

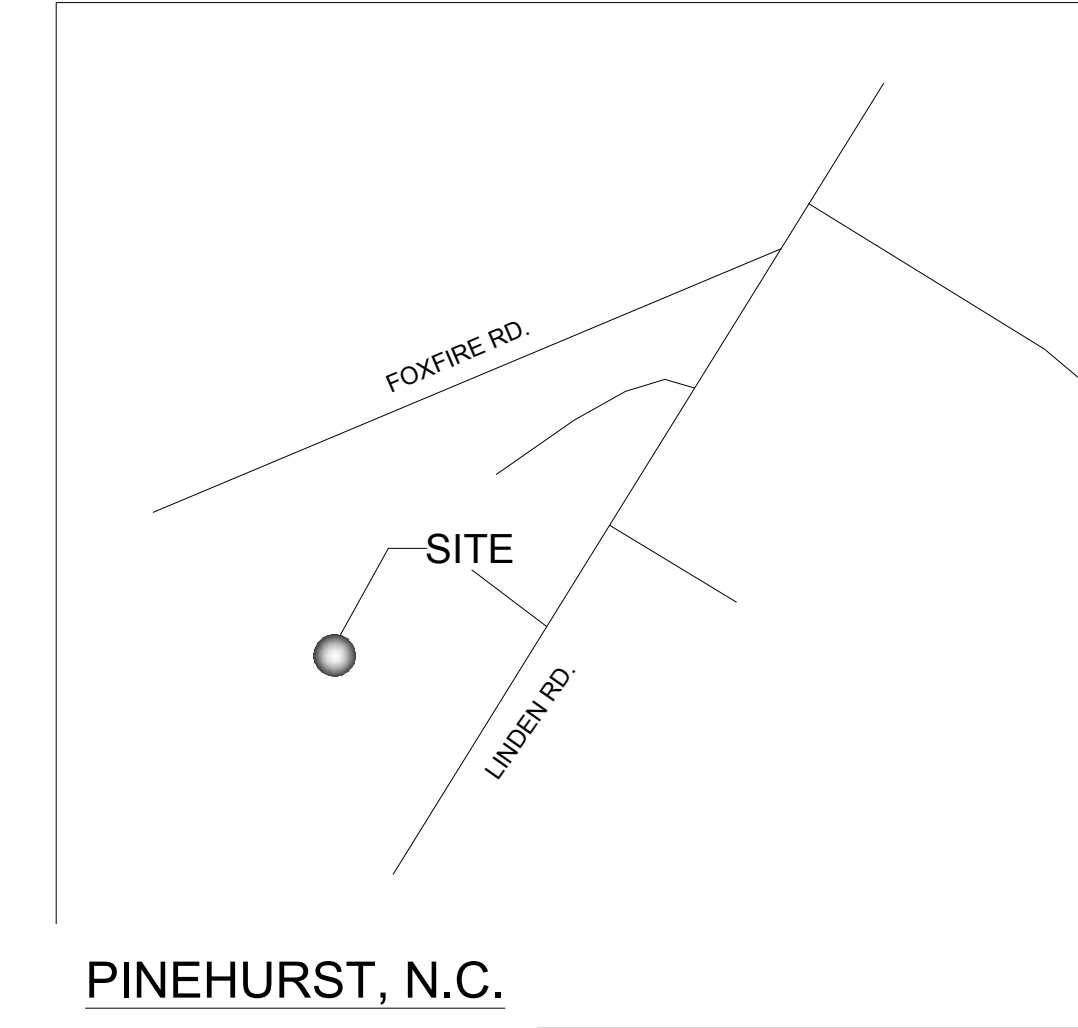
R & M COMMERCIAL REAL ESTATE, LLC

LA FORET

DETAILS

PROJECT DETAILS			
Project Manager:	KSL		
CAD Technician:	RFN/GER		
Reviewed / Approved By:			
Project Number:	18033		

SCALE	
ISSUE DATE	11/13/2019
SHEET NUMBER	C5.2



PINEHURST, N.C.

VICINITY MAP (N.T.S.)



- ALL TREES SHALL BE MULCHED WITH A MINIMUM 6" PERIMETER UNLESS OTHERWISE INDICATED.
- CONTRACTOR SHALL USE HARDWOOD MULCH FOR ALL PLANTER BEDS UNLESS OTHERWISE INDICATED. THE USE OF ANY OTHER MULCHING MATERIAL MUST BE APPROVED BY THE DESIGNER PRIOR TO INSTALLATION. MULCH SHALL NOT COVER THE CROWN / ROOT FLARES OF THE PROPOSED PLANT MATERIAL.
- ALL PLANT MATERIAL SHALL BE APPROVED BY THE DESIGNER PRIOR TO ARRIVAL ON SITE. NO DEVIATIONS OR SUBSTITUTIONS FROM THE PLANT SCHEDULE SHALL BE ALLOWED WITHOUT WRITTEN APPROVAL FROM THE DESIGNER PRIOR TO THE ARRIVAL OF THE PLANT MATERIAL ON SITE.
- TREES, SHRUBS & OTHER PLANTINGS SHALL MEET ALL LOCAL AND STATE REQUIREMENTS.
- ALL PLANTS MUST BE MULCHED WITHIN TWO (2) DAYS OF PLANTING BY COVERING THE ENTIRE PLANTING AREA WITH A 4-INCH THICK MINIMUM LAYER OF MULCH.
- ALL TREES SHALL BE AT LEAST 2" CALIPER AT TIME OF PLANTING UNLESS OTHERWISE SPECIFIED. ALL SHRUBS SHALL BE A MINIMUM SIZE OF TWO (2) GALLONS AT TIME OF PLANTING UNLESS OTHERWISE SPECIFIED.
- FOUNDATION PLANTINGS SHALL BE SPACED AN APPROPRIATE DISTANCE AWAY FROM BUILDING WALLS TO ASSURE PROPER MAINTENANCE AND GROWTH.
- CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING AND MAINTAINING TREE PROTECTION FENCING AROUND ALL "AT-RISK" TREES WITHIN THE VICINITY OF THE CONSTRUCTION ACTIVITY WHETHER SPECIFICALLY INDICATED ON THE PLANS OR NOT. TREE PROTECTION FENCING SHALL BE INSTALLED PRIOR TO BEGINNING ANY CONSTRUCTION OR OTHER DEVELOPMENT ACTIVITIES, AND SHALL BE MAINTAINED AT ALL TIMES THROUGHOUT THE DURATION OF THE PROJECT UNTIL FINAL SITE INSPECTION. REFER TO CONSTRUCTION PLAN DETAIL SHEETS FOR TREE PROTECTION DETAIL(S).
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL PLANT MATERIAL AGAINST DAMAGE DURING THE CONSTRUCTION PERIOD. PROTECTION SHALL BEGIN FROM THE TIME THE PLANT MATERIAL IS INSTALLED AND SHALL CONTINUE UNTIL FORMAL ACCEPTANCE OF THE PROJECT.
- ALL PLANT MATERIAL SHALL BE MAINTAINED UNTIL SUBSTANTIAL COMPLETION IS APPROVED BY THE OWNER. MAINTENANCE SHALL INCLUDE, BUT IS NOT LIMITED TO, WATERING, PRUNING, FERTILIZING, ETC.
- PRUNE PROPOSED TREES TO MAINTAIN 6-FT CLEAR UNDERSTORY HEIGHT.
- JUTE MESH SHALL BE PROVIDED ON ALL SLOPES GREATER THAN 3:1.
- IN THE EVENT OF A DISCREPANCY IN PLANT MATERIAL QUANTITIES BETWEEN THE DRAWINGS AND THE PLANT LISTS, THE LARGER QUANTITIES SHALL BE REQUIRED.
- THE CONTRACTOR SHALL SUPPLY PLANT MATERIAL IN QUANTITIES SUFFICIENT TO COMPLETE THE PLANTING AS SHOWN ON THE PLANS.
- THE CONTRACTOR SHALL LOCATE AND MARK ALL EXISTING AND PROPOSED UTILITIES TO VERIFY PROPOSED TREE LOCATIONS, AND SHALL REPORT ANY CONFLICTS TO THE DESIGNER TO DETERMINE ALTERNATE PLANTING LOCATIONS.
- STAKE ALL PROPOSED TREE PLANTINGS FOR REVIEW AND POTENTIAL ADJUSTMENT BY THE DESIGNER.

LANDSCAPE BUFFER AREA: 26,998 S.F.

BUFFER REQUIREMENTS:
138 LONGLEAF PINES REQUIRED
170 LONGLEAF PINES EXISTING

108 UNDER-STORY TREES REQUIRED
32 UNDER-STORY TREES EXISTING
76 UNDER-STORY TREES PROVIDED (80% EVERGREEN)

360 SHRUBS REQUIRED
360 SHRUBS PROVIDED.

FOUNDATION PLANTINGS
1 PLANTING PER 6" OF FRONT AND SIDE OF STRUCTURE
108 LF PER UNIT = 18 SHRUBS
18 SHRUBS PER UNIT REQUIRED
18 SHRUBS PER UNIT PROVIDED

PLANTING KEY	
	Red Maple
	Redbud
	White Dogwood
	Foster Holly
	Wax Myrtle
	Eleagnus
	Tea Olive
	Yaupon Holly
	Viburnum
	Ex. Longleaf Pine
	Ex. LL Pine for Count
	Ex. Understory for Count
(See Sheet C1.0 for Ex. Trees Removed)	

Village of Pinehurst Construction Plan Approval

All Construction Methods and Materials shall be in accordance with the Village of Pinehurst, Moore County Public Utilities, and NCDOT Standards and Specifications. In the event of a conflict between standards, the more stringent shall govern unless a written waiver is issued by the Village Engineer. Utility Installations and other Public Facilities, including streets, sidewalks, and handicap ramps, have been approved by the Village of Pinehurst and shall be so installed unless a change is authorized by prior written approval. Public Sanitary Sewer and Utility Easements shall be recorded prior to final acceptance and/or issuance of a Certificate of Occupancy by the Village.

Plan Approval Number _____

Engineering _____

Fire Department _____

Planning _____

Moore Co. Public Utilities _____

INFRASTRUCTURE INSPECTION NOTICE TO CONTRACTOR

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Failure to schedule the required inspections shall be grounds for rejection of all work not inspected and issuance of a stop-work order until the project is in compliance

Classification	Key	Common Name	Botanical Name	Quantity	Type / Size	Notes
Tree	AR	Red Maple	Acer rubrum 'October Glory'	7	3" cal., 8' ht. minimum.	Healthy, Well Branched, Full Foliage
	CC1	Redbud 'Forest Pansy'	Cercis canadensis 'Forest Pansy'	15	3" cal., 8' ht. minimum.	Healthy, Well Branched, Full Foliage
	CF1	White Dogwood 'Cherokee Princess'	Cornus florida 'Cherokee Princess'	15	3" cal., 8' ht. minimum.	Healthy, Well Branched, Full Foliage
	WM1	Wax Myrtle	Marella californica	24	3" cal., 8' ht. minimum.	Healthy, Well Branched, Full Foliage
	IA1	Foster Holly (Foster)	Ilex x attenuata 'Foster'	15	3" cal., 8' ht. minimum.	Healthy, Well Branched, Full Foliage
Shrub	FO	Tea Olive	Osmanthus x fortunei	92	See Sizing Note 1	Healthy, Full Foliage
	IV	Yaupon Holly	Ilex vomitoria 'Yaupon'	310	See Sizing Note 1	Healthy, Full Foliage
	VB	Viburnum 'Chindo'	Viburnum awabuki 'Chindo'	156	See Sizing Note 1	Healthy, Full Foliage
		Eleagnus 'Silverberry'	Eleagnus multiflora 'Silverberry'	98	See Sizing Note 1	Healthy, Full Foliage
Sizing Notes						
1.) All shrubs with a <i>mature</i> height of 18" to 30" shall have a minimum <i>installed</i> height of 18" unless otherwise specified.						
2.) All shrubs with a <i>mature</i> height of 36" to 72" shall have a minimum <i>installed</i> height of 30" unless otherwise specified.						
3.) All shrubs with a <i>mature</i> height greater than 72" shall have a minimum <i>installed</i> height of 48" unless otherwise specified.						



SONJA K. BROWN

PO BOX 4299

DB. 3897, PG. 36

00016716 / 8542200800692

ZONE: MULTIP

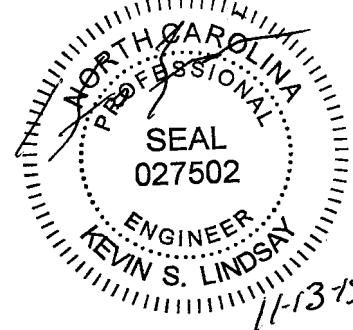
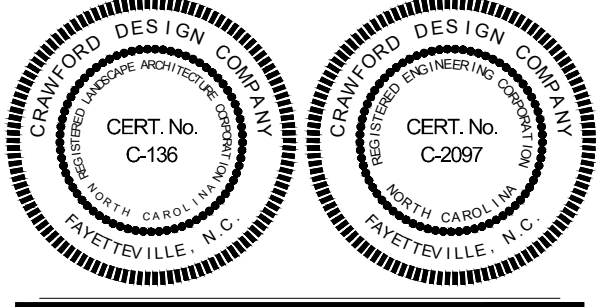
ABUTTING PROPERTIES ZONE: R MF

- JUDY L. TAUFER
203 LAFORET LANE
00021487 / 854220813038
DB. 4821, PG. 498
- PATRICIA PARTRIDGE
PO BOX 3171, PINEHURST, NC
00021488 / 854220813066
DB. 4467, PG. 600
- LAFORET TOWNHOME WEST ASSOC.
PO BOX 3233, PINEHURST, NC
96000573 / 854220814058
DB. 1213, PG. 107
- CAROL A. HUTTER
PO BOX 3233, PINEHURST, NC
00020413 / 854220814010
DB. 98E, PG. 648
- ROGER K. & TERESA S. HOOD
101 LAFORET LANE
00020412 / 854220804937
DB. 1826, PG. 159
- R. DEWEY & JOAN K. JACKSON
5 CARDINAL DR. JACKSON SPRINGS, N
94000272 / 854220814240
DB. 2167, PG. 188

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230C W. Pennsylvania Ave. ♦ Southern Pines, NC 28387
Voice: 910-725-1107
www.crawforddsn.com



[CONSTRUCTION SET]

R & M COMMERCIAL REAL ESTATE, LLC

LA FORET

LANDSCAPE PLAN

PROJECT DETAILS
Project Manager: KSL
CAD Technician: RFN/GER
Reviewed / Approved By:
Project Number: 18033

SCALE 0 50 100
Full Scale: Horiz.: 1" = 50'
Half Scale: Horiz.: 1" = 100'

ISSUE DATE
11/13/2019

SHEET NUMBER

L1.0